Aug. '87

SERVICE MANUAL

SANYO

PORTABLE STEREO RADIO CASSETTE RECORDER

M9921LU

EUROPE

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141 877 29

SPECIFICATIONS

Recording System	DC Bias
Erasing System	DC Erasing
Tape Speed	1-7/8 ips ±3%
Fast Forward Time	80 sec. (C-60 cassette)
Rewind Time	80 sec. (C-60 cassette)
Wow & Flutter	0.35% RMS
Frequency Response	
NORMAL	100 – 8,000 Hz
Signal to Noise Ratio	
without DOLBY	Better than 35dB
Hum & Noise	Less than 50dBs
Crosstalk	
Track to Track	Better than 60dB
Channel to Channel	Better than 50dB
Terminal Impedance	
MIC	10k-ohm
DIN INPUT	0.1 mV/k-ohm
DIN OUTPUT	4.7k-ohm
EXT. Speaker	4ohm
Headphone	8ohm
Current Consumption (at Min. VR)	
RECORD mode	150mA
PLAY mode	145mA
F.FWD mode	145mA
REW mode	145mA
Power Consumption	11W
Output Power	2.5x2W (maximum)
Power Source	
AC	115/230V (50/60Hz)
DC	9V (UM-1, HP 2, D Cell, Monozellen, R20) x 6
Frequency Range	
LW	150 – 350kHz
MW	525 – 1,605kHz
SW	6 – 18MHz
FM	87.5 – 108MHz

–Specifications subject to change without notice.–

WM-6366

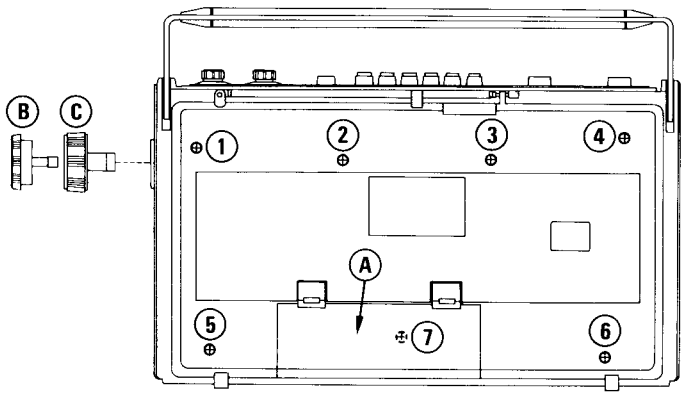
DISASSEMBLY INSTRUCTIONS

CABINET TOP REMOVAL

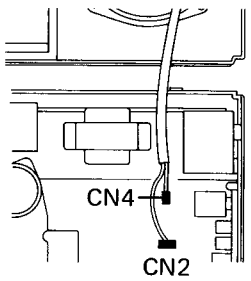
1. Pull out the power cord from the unit and open the cassette compartment lid by pressing the Eject button. Then, take out the cassette tape from the compartment and close the lid.

2. Turn over the unit on a soft surface and remove the battery compartment lid (A). Then, take out the six batteries and pull out the Fine Tuning Knob (B) and Tuning Knob (C).

3. Unscrew the seven screws (1 – 7) fastening the Cabinet Top and place the unit in an upside positon.



4. To remove the Cabinet Top, lift away the Cabinet Top from the unit and pull out the two Connectors (CN2 and CN4) from the Amplifier P.C.Board.



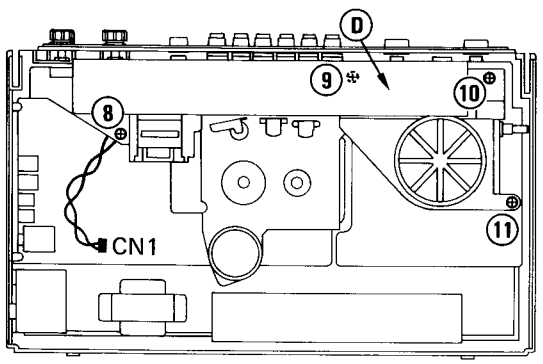
5. Reassemble in the reverse order.

RADIO CHASSIS REMOVAL

1. Follow the instructions for the Cabinet Top Removal and turn the Tuning Shaft fully counter-clockwise.

2. Remove the Dial Plate (D) from the Radio Chassis and unscrew the four screws (8 – 11) fastening the Radio Chassis.

3. To remove the Radio Chassis, pull out the Connector (CN1) from the Amplifier P.C.Board and lift the Radio Chassis.



4. Reassemble in the reverse order.

NOTE:

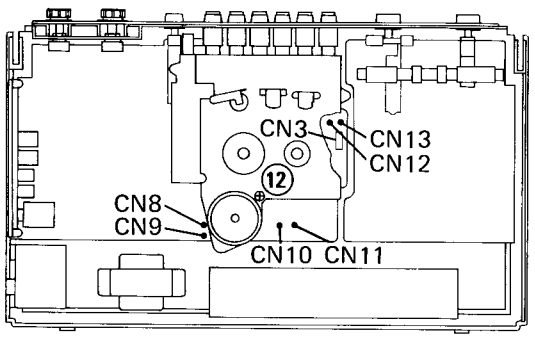
A. Do not turn the Tuning Shaft before the Radio Chassis is mounted to the unit.

B. After mounting the P.C.Board, check to see that the Pointer is properly positioned.

CHASSIS ASSEMBLY REMOVAL

1. Follow the instructions for both removals of the Cabinet Top and the Radio Chassis.

2. Pull out the seven Connectors (CN3,8,9,10,11,12, and 13) from the Amplifier P.C.Board. Unscrew a screw (12) fastening the Chassis and remove the Chassis by lifting it.



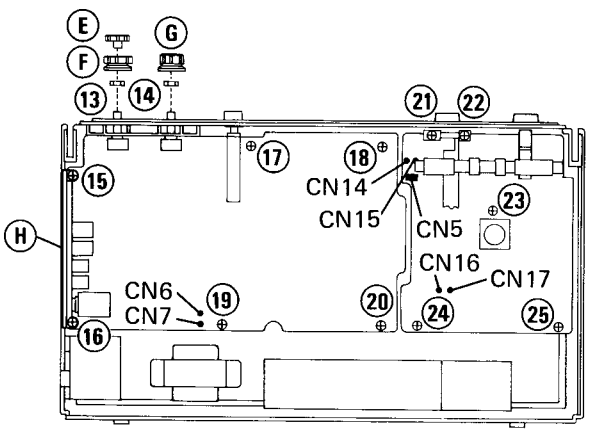
3. Reassemble in the reverse order.

AMPLIFIER P.C.BOARD ASSEMBLY REMOVAL

1. Follow the instructions for the Removals of Cabinet Top, Radio Chassis, and Chassis Assembly.

2. Pull out the right channel Volume Control Knob (E), left channel Volume Control Knob (F), and Tone Control Knob (G) from their shafts. Then, remove the two nuts (13 and 14) holding the Volume Control, and Tone Control.

3. Remove the Jack Plate (H) by unscrewing the two screws (15 and 16) and unscrew the three screws (17 – 20) fastening the Amplifier P.C.Board. Then, pull out the two Connectors (CN6 and CN7) from the Amplifier P.C.Board, and five Connectors (CN5,14,15,16, and 17) from the Radio Tuner P.C.Board.



DISASSEMBLY INSTRUCTIONS (Continued)

4. Remove the Amplifier P.C.Board Assembly by lifting the lower side of the P.C.Board.

5. Reassemble in the reverse order.

RADIO TUNER ASSEMBLY REMOVAL

1. Follow the instructions for the removals of Cabinet Top, Radio Chassis, and Chassis Assembly.

2. Change over, the Band Select Switch to FM. Pull out the five Connectors (CN5, 14, 15, 16, and 17) from the Radio Tuner P.C.Board. Then, remove the Switch Bracket by unscrewing the two screws (21 and 22) fastening it.

3. Unscrew the three screws (23 – 25) fastening the P.C.Board and remove the P.C.Board by lifting it.

4. Reassemble in the reverse order.

NOTE:
Do not turn the Shaft of variable condenser before Radio Chassis is mounted to the unit.

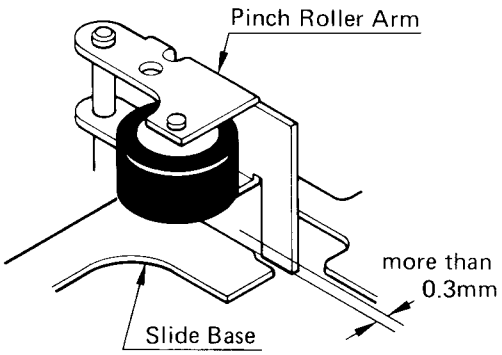
MECHANICAL ADJUSTMENTS

GENERAL REMARKS

Before adjusting the mechanism of this unit, wipe the tape contacting surfaces clean as well as the contacting surfaces of the driving parts with a soft cloth soaked in alcohol.
Trouble may occur because of oil and grease stains.

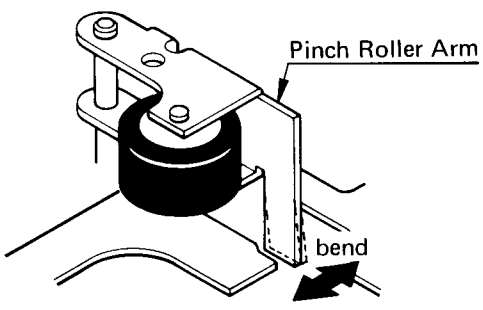
PINCH ROLLER ADJUSTMENT

1. The clearance between the Pinch Roller Arm and the Slide Base should be more than 0.3 mm with the unit in the playback mode.



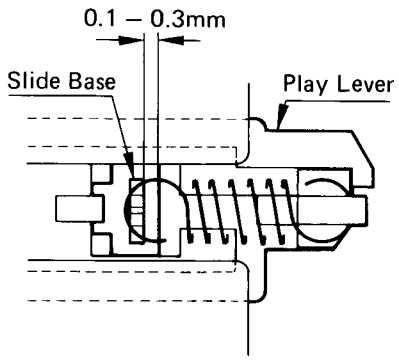
2. Turn on the Power Switch by shorting it and then, check to see that the Take-up Reel should rotate before the Pinch Roller starts rotating while the PLAY button is gradually pressed.

3. If necessary, adjust the clearance by carefully bending the Pinch Roller Arm as illustrated.

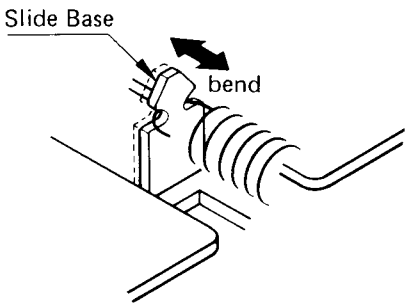


SLIDE BASE ADJUSTMENT

1. With the unit in the playback mode, check to see that the clearance between the Slide Base and the Play Lever is 0.1 – 0.3 mm.



2. If not, adjust the clearance by carefully bending the Slide Base as illustrated.



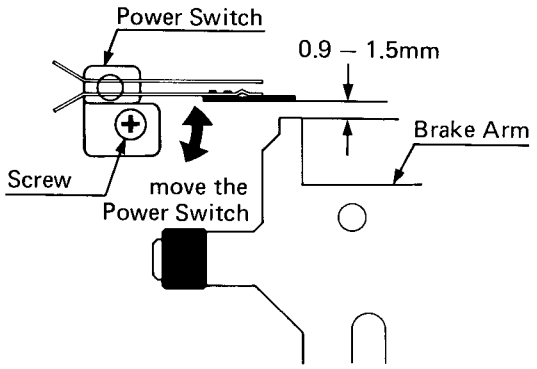
MECHANICAL ADJUSTMENTS (Continued)

POWER SWITCH ADJUSTMENT

1. This Switch should be turned on with the unit in the playback, recording, fast forward, and rewind modes.

2. With the unit in the stop mode, check to see that the clearance between the Power Switch and the Brake Arm is 0.9 – 1.5 mm.

3. If not, loosen the screw fastening the Power Switch and adjust the switch position by moving it as illustrated.

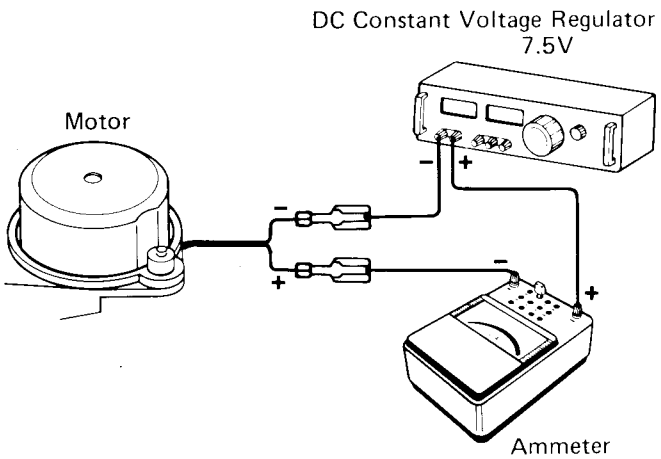


4. After the adjustment, tighten the fastening screw and check to see that the Switch functions by pressing the PLAY button. Then, secure the screw with paint or glue.

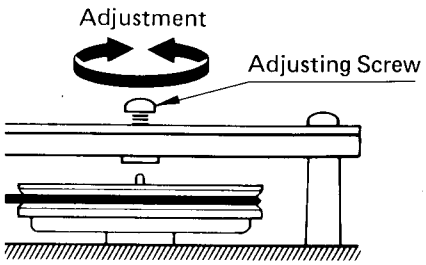
FLYWHEEL ADJUSTMENT

1. Remove the Chassis from the unit by following its instructions.

2. Connect a DC constant-voltage regulator and an ammeter to the lead wires of the Motor as illustrated.
   Then, set the regulator output to 7.5V.



3. Place the Chassis upside down and slowly turn the adjusting screw clockwise until the ammeter needle swings. Then, turn it by 90° in the opposite direction from its position.



4. After the adjustment, secure the adjusting screw with paint or glue.

   NOTE:
   Pay due caution to the polarity of the lead wires when connected to the ammeter.

ELECTRICAL ADJUSTMENTS

REQUIRED EQUIPMENT

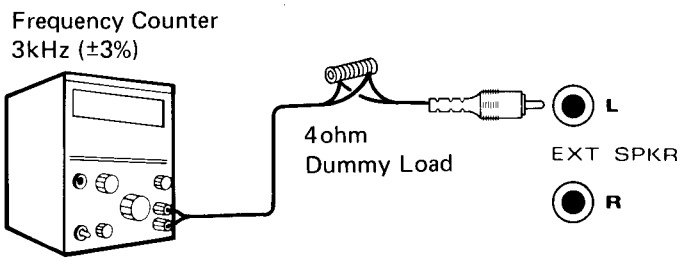
- VTVM
- Frequency Counter
- Dummy Load
  * 4 ohm: for Connection to Ext. Speaker
  * 470k-ohm: for Connection to DIN Socket
- Test Tapes
  3kHz test tape for Tape Speed Adjustment (Example: TEAC MTT-111)
  8kHz test tape for Head Azimuth Adjustment (Example: TEAC MTT-113C)
  1kHz test tape for Playback Output Balance and DIN Output Level (Example: TEAC MTT-112B)
- Alignment Tool

Prior to the Electrical Adjustment, set the Switches as follows:

* Band Select Switch . . . . . TAPE
* Mode Switch . . . . . STEREO
* Function Switch . . . . . TAPE

TAPE SPEED ADJUSTMENT

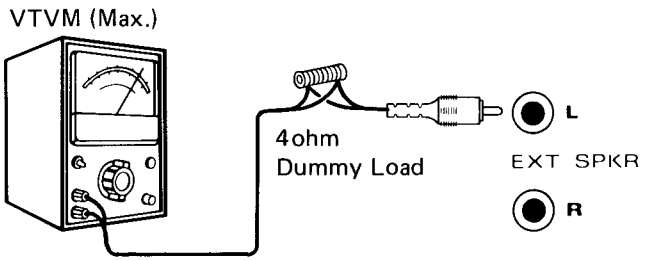
1. Connect a frequency counter to the left or right channel Ext. speaker jack as illustrated and play back a 3 kHz test tape (Example: TEAC MTT-111).



2. Adjust the tape speed by turning the potentiometer inside the Motor until the counter reading becomes 3 kHz (±3%).

R/P HEAD AZIMUTH ADJUSTMENT

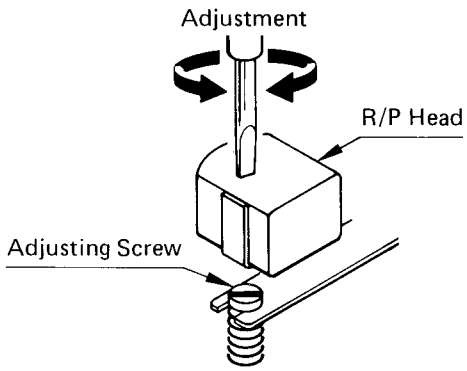
1. Connect a VTVM to the left channel and right channel Ext. speaker jacks as illustrated and play back a 8 kHz test tape (Example: TEAC MTT-113C).

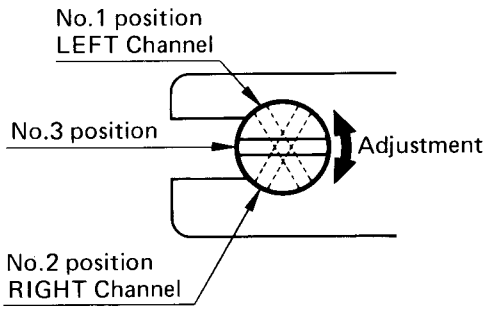


2. Turn the azimuth adjusting screw until the left channel output on the VTVM becomes the maximum. (No. 1 position)

3. Then, turn the azimuth adjusting screw again until the right channel output on the VTVM becomes the maximum. (No. 2 position)

4. Turn the adjusting screw to the center of the No. 1 and No. 2 positions as illustrated. (No. 3 position)





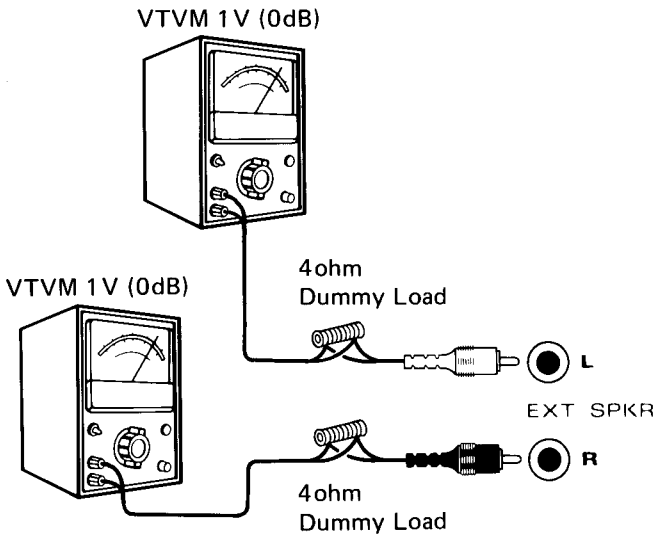
5. Repeat the above described adjustment several times and adjust the azimuth correctly.

6. After the adjustment, secure the adjusting screw with paint or glue.

ELECTRICAL ADJUSTMENTS (Continued)

PLAYBACK OUTPUT BALANCE ADJUSTMENT

1. Connect a VTVM to the left channel and right channel Ext. speaker jacks as illustrated and play back a 1 kHz test tape (Example: TEAC MTT-112B).

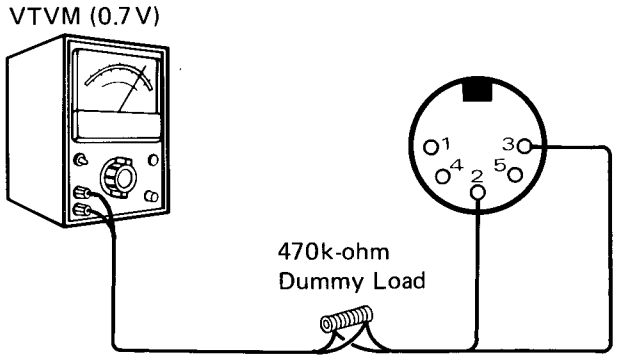


2. Adjust the left channel output by turning the Volume Control to 1 V (0 dB) on the VTVM.

3. Adjust the potentiometer (P201) until the right channel output becomes identical to the left channel output on the VTVM.

DIN OUTPUT LEVEL ADJUSTMENT

1. Connect a VTVM to the left channel output terminals of DIN Socket as illustrated and play back a 1kHz test tape (Example: TEAC MTT-112B).



2. Adjust the left channel output level by turning the Potentiometer (P101) until the VTVM reads 0.7V.

3. Then, adjust the potentiometer (P201) until the right channel output level becomes 0.7V on the VTVM for the right channel by following the same procedure as for the left channel.

TUNER ADJUSTMENT

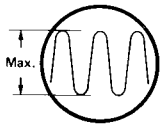
FM MPX ALIGNMENT

Standard test frequency 400 Hz and deviation 75 kHz

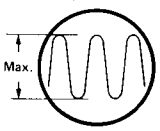
Step	Alignment	Connections		Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT			
1	ALL IC FO (19 kHz) Adjustment	Connect mono SG to antenna terminal. (Input Level: 1mV)	Connect frequency counter or synchro-scope to No. 12 pin of IC (AN7410).	98 MHz	P1	Obtain 19 kHz on the frequency counter or synchro-scope.
2	FM Stereo Signal Separation	Connect Stereo SG to antenna terminal.	Connect VTVM with 4 ohm dummy load, distortion meter, and oscilloscope to R channel Ext. speaker terminal.			
3		Main channel signal of Stereo SG —— ON			Tuning Dial	Maximize amplitude and VTVM reading.
4		Pilot (19 kHz) and Sub channel signals of Stereo SG —— ON				Minimize distortion meter reading with maximum amplitude.
5		L channel and Pilot (19 kHz) signals of Stereo SG —— ON			P2	Minimize amplitude and VTVM reading.
6		Main channel signal of Stereo SG —— ON	Connect VTVM with 4 ohm dummy load, distortion meter, and oscilloscope to L channel Ext. speaker terminal.		Tuning Dial	Maximize amplitude and VTVM reading.
7		Pilot (19 kHz) and Sub channel signals of Stereo SG —— ON				Minimize distortion meter reading with maximum amplitude.
8		R channel and Pilot (19 kHz) signals of Stereo SG —— ON			P2	Minimize amplitude and VTVM reading.
9	Repeat the above adjustments.					

* **Use a screwdriver with plastic grip for all adjustments.**

LW ALIGNMENT

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT				
1	Calibration of Tuning Range	Connect standard loop antenna to output of signal generator. Place bar antenna 60 cm away from loop antenna.	Connect VTVM with 4 ohm dummy load and oscilloscope to Ext. speaker terminal.	145 kHz	Low End	T5	Obtain sine-wave of 400 Hz and maximum amplitude. 
2				365 kHz	High End	TC8	
3	Adjustment of Tracking			170 kHz	170 kHz	L6-1 LW bar ant. coil	
4				310 kHz	310 kHz	TC7	
5	Repeat the above adjustments.						

SW ALIGNMENT

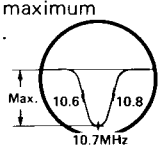
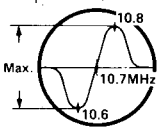
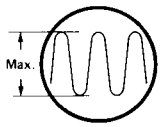
Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT				
1	Calibration of Tuning Range	Connect signal generator to antenna terminal through dummy antenna.	Connect VTVM with 4 ohm dummy load and oscilloscope to Ext. speaker terminal.	5.7 MHz	Low End	T3	Obtain sine-wave of 400 Hz and maximum amplitude. 
2				18.7 MHz	High End	TC4	
3	Adjustment of Tracking			6.5 MHz	6.5 MHz	T2	
4				17 MHz	17 MHz	TC3	
5	Repeat the above adjustments.						

* **Use a screwdriver with plastic grip for all adjustments.**

TUNER ADJUSTMENT (Continued)

FM ALIGNMENT

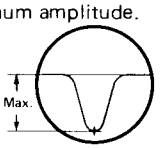
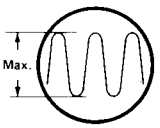
Standard Test Frequency 400 Hz and Deviation 22.5 kHz

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT				
1	Calibration of IF	Place output of gene-scope on Trap Coil (L2).	Connect input terminal of gene-scope to detector output.	10.7 MHz	Low End	Turn T10 (blue core) fully counter-clockwise. T1 and T9	Obtain symmetrical curve and maximum amplitude. 
2						T10 (blue core)	Obtain S curve and maximum amplitude. 
3	Calibration of Tuning Range	Connect signal generator to antenna terminal through dummy antenna.	Connect VTVM with 4 ohm dummy load and oscilloscope to Ext. speaker terminal.	87.2 MHz		L3	Obtain sine-curve and maximum amplitude. 
4				109 MHz	High End	TC2	
5	Adjustment of Tracking			90 MHz	90 MHz	L1	
6				106 MHz	106 MHz	TC1	
7	Repeat the above adjustments.						

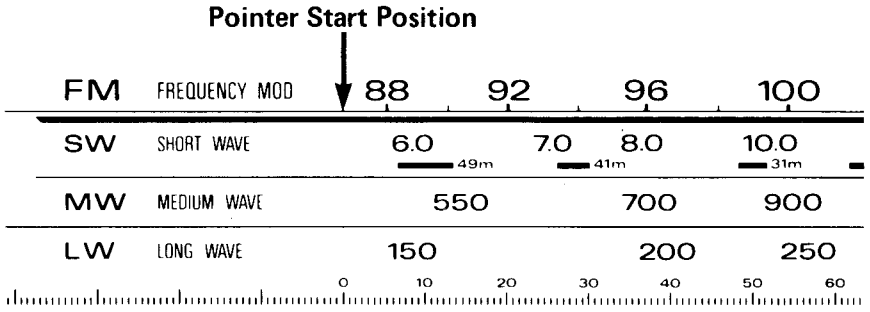
* **Use a screwdriver with plastic grip for all adjustments.**

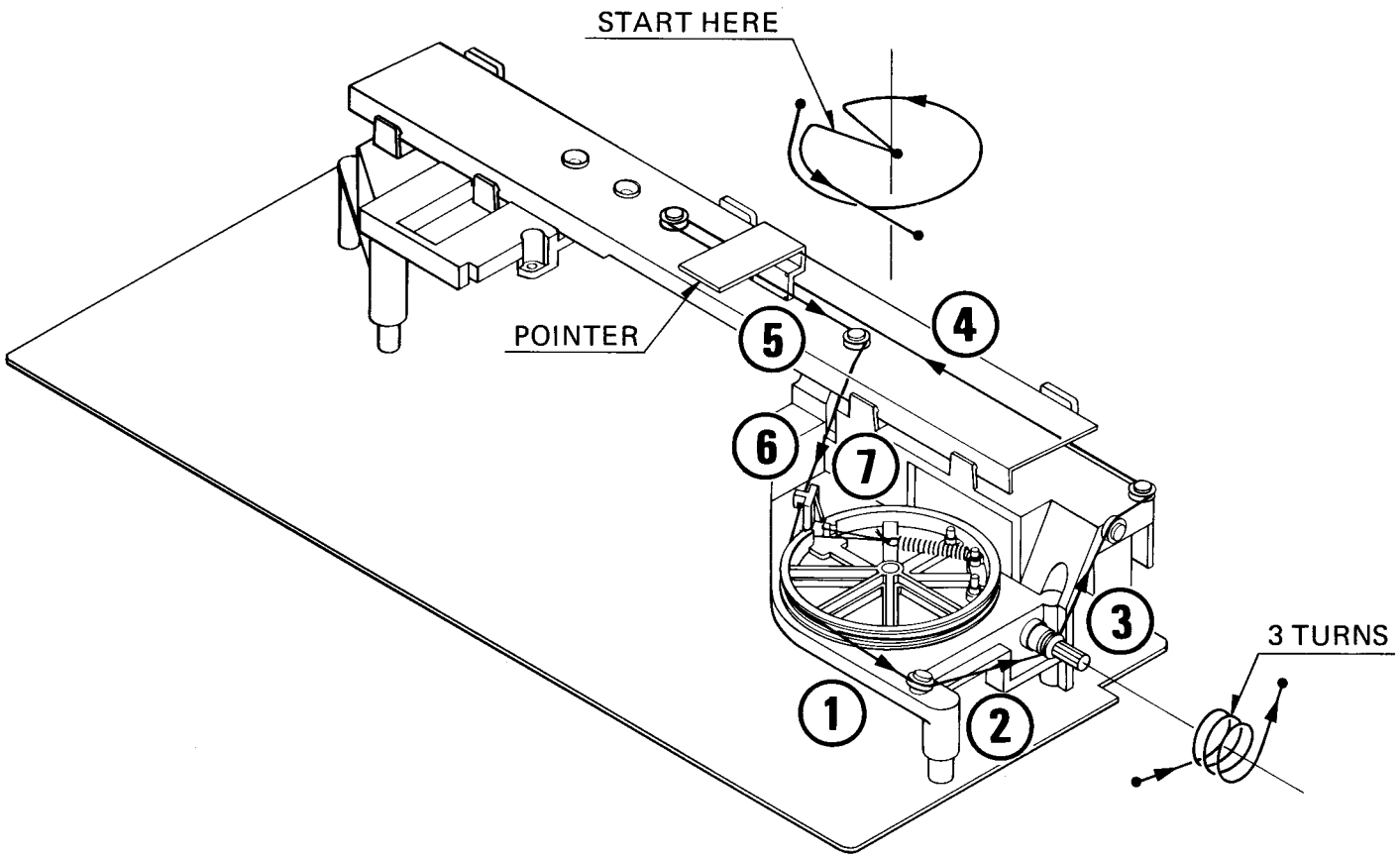
MW ALIGNMENT

Standard test frequency 400 kHz and modulation 30% at AM

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustment	Remarks
		INPUT	OUTPUT				
1	Calibration of IF for AM	Connect standard loop antenna to output terminal of gene-scope. Place bar antenna 60 cm away from loop antenna.	Connect input terminal of gene-scope to detector output.	460 kHz	Low End	T6, T7 and T8	Obtain symmetrical curve and maximum amplitude. 
2	Adjustment of IF Gain						
3	Calibration of Tuning Range	Connect standard loop antenna to output of signal generator. Place bar antenna 60 cm away from loop antenna.	Connect VTVM with 4 ohm dummy load and oscilloscope to Ext. speaker terminal.	515 kHz		T4	Obtain sine wave of 400 Hz and maximum amplitude. 
4				1650 kHz	High End	TC6	
5	Adjustment of Tracking			600 kHz	600 kHz	L6-2 MW bar ant. coil	
6				1400 kHz	1400 kHz	TC5	
7	Repeat the above adjustments.						

DIAL CORD STRINGING





PARTS LIST

PRODUCT SAFETY NOTICE

PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF AN UNIT. COMPONENTS INDICATED BY A MARK ⚠ IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM SHOW COMPONENTS WHOSE VALUE HAS SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE FOLLOWING PARTS LIST BE USED FOR COMPONENT REPLACEMENT POINTED OUT BY THE MARK.

Ref. No.	Part No.	Description	Q'ty
	PACKAGE		
	141 6 1419 38231	Individual Carton	1
	141 6 1449 53500	Styrofoam Case, Left	1
	141 6 1449 53600	Styrofoam Case, Right	1
	141 6 2519 11990	Poly Cover	1
	141 6 2519 25035	Poly Cover	1
	141 6 4559 00100	Serial No. Sheet	3
	ACCESSORIES		
	4 2419 71983	Cassette	1
	⚠ 4 2439 70310	Power Cord	1
	141 2 3529 10600	Cassette Stopper	1
	141 6 2519 11022	Poly Cover	1
	141 6 4729 07400	Caution Label	1
	141 6 4729 16700	Caution Label	1
	142 6 4119 17600	Instruction Book	1
	CABINET		
SP1	4 1519 70920	Speaker (3.2 ohm)	1
SP2	4 1519 70920	Speaker (3.2 ohm)	1
	4 1539 70661	Microphone	2
S8	⚠ 4 2319 72130	Slide Switch (Voltage Select)	1
CN3	4 2359 74810	Connector 4P Assy	1
CN5	4 2359 74812	Connector 4P Assy	1
	4 2449 70210	Antenna	1
T302	⚠ 4 2519 73310	Power Transformer	1
	141 0 1119 55608	Cabinet Top Assy	1
	141 0 1119 55735	Cabinet Bottom Assy	1
	141 0 1249 12602	Cassette Lid Assy	1
	141 0 1719 09101	Handle Assy	1
	141 2 1339 19601	Battery Lid	1
	141 2 1429 07200	Badge	1
	141 2 2719 10900	Handle Holder	2
	141 2 3529 08600	Spacer, Record Lock	2
	141 2 3659 13600	Switch Bracket	1
	141 2 3679 27003	Jack Plate	1
	141 2 3849 03500	Antenna Plate	1
	141 2 4219 12400	Screw	6
	141 2 4219 15000	Screw	2
	141 2 4219 20500	Poly Wave Screw	8
	141 2 4419 07200	Cassette Lid Cushion	2
	141 2 4469 04100	Battery Cushion	1
	141 2 4619 06300	Tube	2
	141 2 4729 03400	Lug	1
	141 2 7319 34500	Switch Plate	1
	141 2 7419 55000	Switch Lever	1
	141 2 7519 38500	Switch Shaft	1
	141 2 8259 04800	Ball	1
	141 2 8519 54700	Switch Spring	1
	141 2 8539 23200	Cassette Lid Spring	1
	101 3 1302 60811	Screw, Pan Hd. +M2.6x8	2
	101 3 1302 60818	Screw, Pan Hd. +M2.6x8	1
	103 3 1303 01011	Screw, Pan Hd. Tapping-2 +M3.0x10	10
	103 3 1303 01211	Screw, Pan Hd. Tapping-2 +M3.0x12	3
	103 3 1303 02511	Screw, Pan Hd. Tapping-2 +M3x25	5
	112 3 1301 50040	E Ring M1.5	1
	141 2 1629 03700	Switch Lever Knob	2
	141 2 1629 03800	Switch Lever Knob	1
	141 2 1639 23000	Volume Knob	1
	141 2 1639 27800	Volume Top Knob	1

Ref. No.	Part No.	Description	Q'ty
	CABINET		
	141 2 1639 27900	Volume Bottom Knob	1
	141 2 1639 28000	Fine Tuning Knob	1
	141 2 1639 28100	Tuning Knob	1
	141 2 8539 25300	Fine Tuning Knob Spring	1
	141 2 8539 25400	Tuning Knob Spring	1
	141 2 1649 11502	Pause Knob	1
	141 2 2449 26800	Switch Knob Screen	2
	141 2 2449 27100	Switch Knob Screen	1
	103 3 1303 00811	Screw, Pan Hd. Tapping-2 +M3.0x8	1
	POWER SUPPLY P.C.B. ASSY		
	4 1919 71290	Power Supply P.C.B. Assy	1
	4 2359 70990	RT Pin Socket	1
	141 2 4729 05000	Staple 5	2
	4 2359 70910	Fuse Holder	2
F1	⚠ 4 2349 70140	Fuse (1 AT)	1
	141 2 4359 21300	Socket Cover	1
	⚠ 4 2359 73682	AC DC Power Socket	1
C323	CC2 2 3500 ZG00C	Ceramic 0.022 μF 50V +80, −20%	1
C324	CC2 2 3500 ZG00C	Ceramic 0.022 μF 50V +80, −20%	1
C325	CD1 0 8160 0000V	Electrolytic 1000 μF 16V	1
C326	CC2 2 3500 ZG00C	Ceramic 0.022 μF 50V +80, −20%	1
C327	CC2 2 3500 ZG00C	Ceramic 0.022 μF 50V +80, −20%	1
D325	202 5 2300 01710	Diode, DS17	1
D326	202 5 2300 01810	Diode, DS18	1
	RADIO TUNER P.C.B. ASSY		
	4 1259 71261	Radio Tuner P.C.B. Assy	1
	141 2 3229 23000	Shield Plate	1
	141 2 3229 25600	Shield Plate	1
	141 2 2449 32700	Sheet	1
	141 2 4469 28200	PVC Cushion	1
	141 2 4729 04400	Staple 12.5	19
	141 2 4729 05000	Staple 5	7
	141 2 4729 04700	Staple 10	1
	4 2569 70750	Shield Case	1
FB1	4 2539 70210	Ferrite Bead	1
BPF1	4 2579 70830	Antenna Coil FM	1
C1	CC1 0 1500 KD00C	Ceramic 100 pF 50V ±10%	1
C2	CC1 0 3250 ZG00C	Ceramic 0.01 μF 25V +80, −20%	1
C3	CC1 0 3250 ZG00C	Ceramic 0.01 μF 25V +80, −20%	1
C4	CC1 0 3500 KE00C	Ceramic 0.01 μF 50V ±10%	1
C5	CC1 0 2500 KE00C	Ceramic 0.001 μF 50V ±10%	1
C6	CC2 0 0500 JCH0C	Ceramic 20 pF 50V ±5%	1
C7	CC3 0 A500 CD00C	Ceramic 3 pF 50V ±0.2PF	1
C8	CC1 0 A500 CD00C	Ceramic 1 pF 50V ±0.2PF	1
C9	CC1 0 1500 KD00C	Ceramic 100 pF 50V ±10%	1
C10	CC1 0 3250 ZG00C	Ceramic 0.01 μF 25V +80, −20%	1
C11	CC1 0 3500 KE00C	Ceramic 0.01 μF 50V ±10%	1
C12	CC1 5 0500 JCH0C	Ceramic 15 pF 50V ±5%	1
C13	CC1 0 0500 JCH0C	Ceramic 10 pF 50V ±5%	1
C14	CC1 5 0500 JCH0C	Ceramic 15 pF 50V ±5%	1
C15	CC2 2 0500 JCH0C	Ceramic 22 pF 50V ±5%	1
C16	CC5 0 A500 CCH0C	Ceramic 5 pF 50V ±0.2PF	1
C17	CC4 7 3250 ZG00C	Ceramic 0.047 μF 25V +80, −20%	1
C18	CC1 0 3250 ZG00C	Ceramic 0.01 μF 25V +80, −20%	1
C19	CC1 0 3250 ZG00C	Ceramic 0.01 μF 25V +80, −20%	1
C20	CC2 2 3500 KE00C	Ceramic 0.022 μF 50V ±10%	1
C21	CC2 2 3500 KE00C	Ceramic 0.022 μF 50V ±10%	1

PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
	RADIO TUNER P.C.B. ASSY		
C22	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C23	CD2 2 6100 0000V	Electrolytic 22 μF 10V	1
C24	CD4 7 5100 0000V	Electrolytic 4.7 μF 10V	1
C25	CC2 2 1500 KE00C	Ceramic 220 pF 50V ±10%	1
C26	CC2 2 1500 KE00C	Ceramic 220 pF 50V ±10%	1
C27	CC1 0 1500 KD00C	Ceramic 100 pF 50V ±10%	1
C28	CD1 0 5100 0000V	Electrolytic 1 μF 10V	1
C29	CC4 7 3250 ZG00C	Ceramic 0.047 μF 25V +80, −20%	1
C30	CC1 5 0500 JD00C	Ceramic 15 pF 50V ±5%	1
C32	CC2 0 A500 CD00C	Ceramic 2 pF 50V ±0.2PF	1
C33	CC6 0 A500 CD00C	Ceramic 6 pF 50V ±0.2PF	1
C34	CC1 8 0500 KD00C	Ceramic 18 pF 50V ±10%	1
C35	CC2 0 0500 KD00C	Ceramic 20 pF 50V ±10%	1
C36	CU1 0 1500 J000V	Mica 100 pF 50V	1
C37	CS3 1 2500 J000V	Polystyrol 0.0031 μF 50V ±5%	1
C38	CS3 5 1500 J000V	Polystyrol 350 pF 50V ±5%	1
C39	CS2 0 1500 J000V	Polystyrol 200 pF 50V ±5%	1
C40	CC3 0 A500 CD00C	Ceramic 3 pF 50V ±0.2PF	1
C41	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C42	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C43	CD2 2 6100 0000V	Electrolytic 22 μF 10V	1
C44	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C45	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C46	CC1 0 3250 ZG00C	Ceramic 0.01 μF 25V +80, −20%	1
C47	CI1 0 3250 KE00C	Boundary 0.01 μF 25V ±10%	1
C48	CI1 0 3250 KE00C	Boundary 0.01 μF 25V ±10%	1
C49	CD4 7 4100 0000V	Electrolytic 0.47 μF 10V	1
C50	CC1 0 2500 KE00C	Ceramic 0.001 μF 50V ±10%	1
C51	CD2 2 6100 0000V	Electrolytic 22 μF 10V	1
C52	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C53	CS4 7 1500 J000V	Polystyrol 470 pF 50V ±5%	1
C54	CD4 7 4100 0000V	Electrolytic 0.47 μF 10V	1
C55	CA2 2 4100 M000V	Aluminum 0.22 μF 10V ±20%	1
C56	CD1 0 5100 0000V	Electrolytic 1 μF 10V	1
C57	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C58	CM4 7 3500 K00SV	Mylar 0.047 μF 50V ±10%	1
C59	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C60	CD2 2 7100 0000V	Electrolytic 220 μF 10V	1
C61	CD4 7 4100 0000V	Electrolytic 0.47 μF 10V	1
C62	CI1 5 3250 KE00C	Boundary 0.015 μF 25V ±10%	1
C63	CI3 9 2250 KE00C	Boundary 0.0039 μF 25V ±10%	1
C64	CI3 9 2250 KE00C	Boundary 0.0039 μF 25V ±10%	1
C65	CD4 7 4100 0000V	Electrolytic 0.47 μF 10V	1
C66	CI1 5 3250 KE00C	Boundary 0.015 μF 25V ±10%	1
C67	CI3 9 2250 KE00C	Boundary 0.0039 μF 25V ±10%	1
C68	CI3 9 2250 KE00C	Boundary 0.0039 μF 25V ±10%	1
C69	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C70	CC2 2 3250 ZG00C	Ceramic 0.022 μF 25V +80, −20%	1
C71	CD4 7 7100 0000V	Electrolytic 470 μF 10V	1
C72	CD2 2 6100 0000V	Electrolytic 22 μF 10V	1
C73	CC2 2 0500 JD00C	Ceramic 22 pF 50V ±5%	1
CF1	4 2539 70580	Ceramic Filter	1
CN7	4 2369 71850	Connector 4P	1
D1	4 2029 70860	Diode, ITT73N	1
D2	4 2029 70791	Diode, ITT410	1
D3	202 5 9110 18820	Diode, 1S188	1
D4	202 5 9110 18820	Diode, 1S188	1
D5	202 5 9110 18820	Diode, 1S188	1
D6	202 5 3210 05120	Diode, GZA5.1U	1
D7	4 2029 70860	Diode, ITT73N	1
IC1	4 2069 70232	IC, μPC1018	1
IC2	4 2069 70500	IC, AN7410	1
L1	4 2599 70144	RF Coil	1
L2	4 2659 70130	Loading Coil (2.4 μH)	1
L3	4 2589 70381	OSC Coil	1
L4	4 2659 70270	Loading Coil (24 μH)	1
L5	4 2659 70241	Loading Coil (1 mH)	1
L6	4 2579 70334	Bar Antenna	1
P1	4 2229 72160	Potentiometer (B-10k)	1
P2	4 2229 72061	Potentiometer (B-30k)	1
PVC1	4 2249 70520	Variable Condenser	1

Ref. No.	Part No.	Description	Q'ty
	RADIO TUNER P.C.B. ASSY		
Q1	4 2039 70380	Transistor, 2SC1674	1
Q2	4 2039 70460	Transistor, 2SC1675	1
Q3	4 2039 70460	Transistor, 2SC1675	1
R2	RD1 0 4251 JS000	Carbon 100k ohm 1/4W ±5%	1
R3	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R4	RD1 0 1251 JS000	Carbon 100 ohm 1/4W ±5%	1
R5	RD3 3 1251 JS000	Carbon 330 ohm 1/4W ±5%	1
R6	RD3 3 1251 JS000	Carbon 330 ohm 1/4W ±5%	1
R7	RD3 3 1251 JS000	Carbon 330 ohm 1/4W ±5%	1
R8	RD3 3 1251 JS000	Carbon 330 ohm 1/4W ±5%	1
R9	RD3 3 2251 JS000	Carbon 3.3k ohm 1/4W ±5%	1
R10	RD1 0 4251 JS000	Carbon 100k ohm 1/4W ±5%	1
R11	RD1 0 4251 JS000	Carbon 100k ohm 1/4W ±5%	1
R12	RD3 3 0251 JS000	Carbon 33 ohm 1/4W ±5%	1
R13	RD4 7 3251 JS000	Carbon 47k ohm 1/4W ±5%	1
R14	RD1 0 4251 JS000	Carbon 100k ohm 1/4W ±5%	1
R15	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R16	RD1 0 1251 JS000	Carbon 100 ohm 1/4W ±5%	1
R17	RD8 2 4251 JS000	Carbon 820k ohm 1/4W ±5%	1
R18	RD3 3 0251 JS000	Carbon 33 ohm 1/4W ±5%	1
R19	RD2 2 1251 JS000	Carbon 220 ohm 1/4W ±5%	1
R20	RD1 0 1251 JS000	Carbon 100 ohm 1/4W ±5%	1
R21	RD3 3 1251 JS000	Carbon 330 ohm 1/4W ±5%	1
R22	RD8 2 1251 JS000	Carbon 820 ohm 1/4W ±5%	1
R23	RD1 0 1251 JS000	Carbon 100 ohm 1/4W ±5%	1
R24	RD1 0 2251 JN000	Carbon 1k ohm 1/4W ±5%	1
R25	RD1 0 2251 JN000	Carbon 1k ohm 1/4W ±5%	1
R26	RD4 7 2251 JS000	Carbon 4.7k ohm 1/4W ±5%	1
R27	RD4 7 2251 JS000	Carbon 4.7k ohm 1/4W ±5%	1
R28	RD1 0 4251 JS000	Carbon 100k ohm 1/4W ±5%	1
R29	RD8 2 4251 JS000	Carbon 820k ohm 1/4W ±5%	1
R30	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R31	RD2 2 0251 JS000	Carbon 22 ohm 1/4W ±5%	1
R32	RD5 6 A251 JS000	Carbon 5.6 ohm 1/4W ±5%	1
R33	RD5 6 0251 JS000	Carbon 56 ohm 1/4W ±5%	1
R34	RD1 0 1251 JS000	Carbon 100 ohm 1/4W ±5%	1
R35	RD1 0 3251 JS000	Carbon 10k ohm 1/4W ±5%	1
R36	RD4 7 3251 JS000	Carbon 47k ohm 1/4W ±5%	1
R37	RD5 6 2251 JS000	Carbon 5.6k ohm 1/4W ±5%	1
R38	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R39	RD4 7 2251 JS000	Carbon 4.7k ohm 1/4W ±5%	1
R40	RD5 6 2251 JS000	Carbon 5.6k ohm 1/4W ±5%	1
R41	RD3 3 0251 JS000	Carbon 33 ohm 1/4W ±5%	1
R42	RD1 8 3251 JS000	Carbon 18k ohm 1/4W ±5%	1
R43	RD1 0 2251 JS000	Carbon 1k ohm 1/4W ±5%	1
R44	RD4 7 3251 JS000	Carbon 47k ohm 1/4W ±5%	1
R45	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R46	RD3 3 2251 JS000	Carbon 3.3k ohm 1/4W ±5%	1
R47	RD3 3 2251 JS000	Carbon 3.3k ohm 1/4W ±5%	1
R48	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R49	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R50	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R51	RD2 2 2251 JS000	Carbon 2.2k ohm 1/4W ±5%	1
R52	RD1 0 2251 JS000	Carbon 1k ohm 1/4W ±5%	1
R53	RD1 0 3251 JS000	Carbon 10k ohm 1/4W ±5%	1
R54	RD1 0 4251 JS000	Carbon 100k ohm 1/4W ±5%	1
R55	RD1 0 4251 JS000	Carbon 100k ohm 1/4W ±5%	1
R56	RD1 0 1251 JS000	Carbon 100 ohm 1/4W ±5%	1
R57	RD1 0 1251 JS000	Carbon 100 ohm 1/4W ±5%	1
R58	RD3 3 0251 JS000	Carbon 33 ohm 1/4W ±5%	1
R59	RD3 3 1251 JS000	Carbon 330 ohm 1/4W ±5%	1
S3	4 2319 72452	Lever Switch (Mode)	1
S4	4 2319 72180	Slide Switch (Band Select)	1
T1	4 2569 70990	IFT (10.7 MHz)	1
T2	4 2579 70721	Antenna Coil	1
T3	4 2589 71420	OSC Transformer	1
T4	4 2589 71410	OSC Transformer	1
T5	4 2589 71400	OSC Transformer	1
T6	4 2569 71030	IFT (455 kHz)	1
T7	4 2569 71020	IFT (455 kHz)	1

PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
	RADIO TUNER P.C.B. ASSY		
T8	4 2569 71010	IFT (455 kHz)	1
T9	4 2569 70322	IFT (10.7 MHz)	1
T10	4 2569 70332	IFT (10.7 MHz)	1
TC3	4 2249 70530	Trimmer Condenser	1
TC4	4 2249 70530	Trimmer Condenser	1
TC5	4 2249 70290	Trimmer Condenser	1
TC6	4 2249 70290	Trimmer Condenser	1
TC7	4 2249 70350	Trimmer	1
TC8	4 2249 70350	Trimmer	1
	4 2369 72490	Test Point	3
	4 2369 70740	RT Pin	4
	AMPLIFIER P.C.B. ASSY		
	4 1329 75544	Amplifier P.C.B. Assy	1
	141 2 3659 10200	Beat Switch Bracket	1
	101 3 1302 60411	Screw, Pan Hd. +M2.6x4	3
	141 2 3229 24500	Volume, Shield Plate	1
	141 2 4729 05000	Staple 5	2
CN7	4 2359 74811	Connector 4P Assy	1
C101	CM2 2 3500 K00SV	Mylar 0.022 μF 50V ±10%	1
C102	CM5 6 3500 K00SV	Mylar 0.056 μF 50V ±10%	1
C103	CC3 3 1500 KE00C	Ceramic 330 pF 50V ±10%	1
C104	CD1 0 7100 0000V	Electrolytic 100 μF 10V	1
C105	CM1 2 2500 K00SV	Mylar 0.0012 μF 50V ±10%	1
C106	CD4 7 5100 0000V	Electrolytic 4.7 μF 10V	1
C107	CM1 5 2500 K00SV	Mylar 0.0015 μF 50V ±10%	1
C108	CC5 6 1500 KE00C	Ceramic 560 pF 50V ±10%	1
C109	CC1 0 1500 KE00C	Ceramic 100 pF 50V ±10%	1
C110	CD2 2 6100 0000V	Electrolytic 22 μF 10V	1
C111	CM1 5 3500 K00SV	Mylar 0.015 μF 50V ±10%	1
C112	CD4 7 5100 0000V	Electrolytic 4.7 μF 10V	1
C113	CM2 7 2500 K00SV	Mylar 0.0027 μF 50V ±10%	1
C114	CD1 0 5100 0000V	Electrolytic 1 μF 10V	1
C115	CM3 3 2500 K00SV	Mylar 0.0033 μF 50V ±10%	1
C116	CD2 2 7100 0000V	Electrolytic 220 μF 10V	1
C117	CD1 0 5100 0000V	Electrolytic 1 μF 10V	1
C118	CD1 0 6100 0000V	Electrolytic 10 μF 10V	1
C119	CM4 7 3500 K00SV	Mylar 0.047 μF 50V ±10%	1
C120	CD1 0 5100 0000V	Electrolytic 1 μF 10V	1
C121	CC1 0 2500 KE00C	Ceramic 0.001 μF 50V ±10%	1
C122	CD4 7 6100 0000V	Electrolytic 47 μF 10V	1
C123	CD1 0 7100 0000V	Electrolytic 100 μF 10V	1
C124	CD2 2 7100 0000V	Electrolytic 220 μF 10V	1
C125	CC3 3 1500 KE00C	Ceramic 330 pF 50V ±10%	1
C126	CD1 0 7100 0000V	Electrolytic 100 μF 10V	1
C127	CD4 7 7100 0000V	Electrolytic 470 μF 10V	1
C128	CD4 7 7160 0000V	Electrolytic 470 μF 16V	1
C129	CM1 5 4500 K00SV	Mylar 0.15 μF 50V ±10%	1
C130	CD1 0 7100 0000V	Electrolytic 100 μF 10V	1
C131	CD2 2 6100 0000V	Electrolytic 22 μF 10V	1
C132	CC2 7 1500 KE00C	Ceramic 270 pF 50V ±10%	1
C133	CC2 2 2500 KE00C	Ceramic 0.0022 μF 50V ±10%	1
C201	CM2 2 3500 K00SV	Mylar 0.022 μF 50V ±10%	1
C202	CM5 6 3500 K00SV	Mylar 0.056 μF 50V ±10%	1
C203	CC3 3 1500 KE00C	Ceramic 330 pF 50V ±10%	1
C204	CD1 0 7100 0000V	Electrolytic 100 μF 10V	1
C205	CM1 2 2500 K00SV	Mylar 0.0012 μF 50V ±10%	1
C206	CD4 7 5100 0000V	Electrolytic 4.7 μF 10V	1
C207	CM1 5 2500 K00SV	Mylar 0.0015 μF 50V ±10%	1
C208	CC5 6 1500 KE00C	Ceramic 560 pF 50V ±10%	1
C209	CC1 0 1500 KE00C	Ceramic 100 pF 50V ±10%	1
C210	CD2 2 6100 0000V	Electrolytic 22 μF 10V	1
C211	CM1 5 3500 K00SV	Mylar 0.015 μF 50V ±10%	1
C212	CD4 7 5100 0000V	Electrolytic 4.7 μF 10V	1
C213	CM2 7 2500 K00SV	Mylar 0.0027 μF 50V ±10%	1
C214	CD1 0 5100 0000V	Electrolytic 1 μF 10V	1
C215	CM3 3 2500 K00SV	Mylar 0.0033 μF 50V ±10%	1
C216	CD2 2 7100 0000V	Electrolytic 220 μF 10V	1
C217	CD1 0 5100 0000V	Electrolytic 1 μF 10V	1
C218	CD1 0 6100 0000V	Electrolytic 10 μF 10V	1

Ref. No.	Part No.	Description	Q'ty
	AMPLIFIER P.C.B. ASSY		
C219	CM4 7 3500 K00SV	Mylar 0.047 μF 50V ±10%	1
C220	CD1 0 5100 0000V	Electrolytic 1 μF 10V	1
C221	CC1 0 2500 KE00C	Ceramic 0.001 μF 50V ±10%	1
C222	CD4 7 6100 0000V	Electrolytic 47 μF 10V	1
C223	CD1 0 7100 0000V	Electrolytic 100 μF 10V	1
C224	CD2 2 7100 0000V	Electrolytic 220 μF 10V	1
C225	CC3 3 1500 KE00C	Ceramic 330 pF 50V ±10%	1
C226	CD1 0 7100 0000V	Electrolytic 100 μF 10V	1
C227	CD4 7 7100 0000V	Electrolytic 470 μF 10V	1
C228	CD4 7 7160 0000V	Electrolytic 470 μF 16V	1
C229	CM1 5 4500 K00SV	Mylar 0.15 μF 50V ±10%	1
C230	CD1 0 7100 0000V	Electrolytic 100 μF 10V	1
C231	CD2 2 6100 0000V	Electrolytic 22 μF 10V	1
C232	CC2 7 1500 KE00C	Ceramic 270 pF 50V ±10%	1
C233	CC2 2 2500 KE00C	Ceramic 0.0022 μF 50V ±10%	1
C301	CD1 0 6100 0000V	Electrolytic 10 μF 10V	1
C302	CM8 2 2500 K00SV	Mylar 0.0082 μF 50V ±10%	1
C303	CM2 2 3500 K00SV	Mylar 0.022 μF 50V ±10%	1
C304	CM1 0 2500 K00SV	Mylar 0.001 μF 50V ±10%	1
C305	CP1 8 2101 J000V	Polypropylene 0.0018 μF 100V ±5%	1
C306	CM2 2 3500 K00SV	Mylar 0.022 μF 50V ±10%	1
C307	CM6 8 2500 K00SV	Mylar 0.0068 μF 50V ±10%	1
C308	CM2 2 3500 K00SV	Mylar 0.022 μF 50V ±10%	1
C309	CD1 0 6160 0000V	Electrolytic 10 μF 16V	1
C310	CD1 0 7160 0000V	Electrolytic 100 μF 16V	1
C322	CD1 0 8160 0000V	Electrolytic 1000 μF 16V	1
C328	CD1 0 7160 0000V	Electrolytic 100 μF 16V	1
C350	CC1 0 2500 KE00C	Ceramic 0.001 μF 50V ±10%	1
D101	202 5 2810 44210	Diode, DS442	1
D102	202 5 2810 44210	Diode, DS442	1
D103	202 5 9110 18820	Diode, 1S188	1
D201	202 5 2810 44210	Diode, DS442	1
D202	202 5 2810 44210	Diode, DS442	1
D203	202 5 9110 18820	Diode, 1S188	1
IC101	4 2069 70071	IC, TA7137P	1
IC102	206 5 0844 11210	IC, LA4112	1
IC201	4 2069 70071	IC, TA7137P	1
IC202	206 5 0844 11210	IC, LA4112	1
J101	4 2359 71780	Jack 1P (Ext. Microphone, Left)	1
J102	4 2359 71390	Jack 1P (Ext. Speaker, Left)	1
J201	4 2359 71780	Jack 1P (Ext. Microphone, Right)	1
J202	4 2359 71390	Jack 1P (Ext. Speaker, Right)	1
J301	4 2359 73243	Jack 1P (Headphones)	1
J303	4 2359 71552	DIN Socket 5P	1
L101	4 2729 70310	Shield Coil (33 mH)	1
L201	4 2729 70310	Shield Coil (33 mH)	1
L301	4 2539 70410	Choke Coil (90 μH)	1
L302	4 2539 70590	Choke Coil (500 μH)	1
P101	4 2229 72963	Potentiometer (B-1k)	1
P102	4 2229 72973	Potentiometer (B-300k)	1
P201	4 2229 72963	Potentiometer (B-1k)	1
P202	4 2229 72973	Potentiometer (B-300k)	1
Q101	203 5 5100 53670	Transistor, 2SC536	1
Q201	203 5 5100 53670	Transistor, 2SC536	1
Q301	203 5 5100 53670	Transistor, 2SC536	1
Q302	203 5 4570 73450	Transistor, 2SD734	1
R101	RD1 0 3251 JM000	Carbon 10k ohm 1/4W ±5%	1
R102	RD2 7 2251 JM000	Carbon 2.7k ohm 1/4W ±5%	1
R103	RD1 0 3251 JM000	Carbon 10k ohm 1/4W ±5%	1
R104	RD1 2 2251 JM000	Carbon 1.2k ohm 1/4W ±5%	1
R105	RD1 0 0251 JN000	Carbon 10 ohm 1/4W ±5%	1
R106	RD2 2 2251 JM000	Carbon 2.2k ohm 1/4W ±5%	1
R107	RD5 6 3251 JM000	Carbon 56k ohm 1/4W ±5%	1
R108	RD1 2 3251 JM000	Carbon 12k ohm 1/4W ±5%	1
R109	RD8 2 2251 JM000	Carbon 8.2k ohm 1/4W ±5%	1
R110	RD2 2 2251 JM000	Carbon 2.2k ohm 1/4W ±5%	1
R111	RD1 5 4251 JM000	Carbon 150k ohm 1/4W ±5%	1
R112	RD1 8 3251 JM000	Carbon 18k ohm 1/4W ±5%	1
R113	RD1 0 2251 JM000	Carbon 1k ohm 1/4W ±5%	1

PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
	AMPLIFIER P.C.B. ASSY		
R114	RD1 8 3251 JM000	Carbon 18k ohm 1/4W ±5%	1
R115	RD2 2 2251 JM000	Carbon 2.2k ohm 1/4W ±5%	1
R116	RD3 3 3251 JM000	Carbon 33k ohm 1/4W ±5%	1
R118	RD1 8 4251 JM000	Carbon 180k ohm 1/4W ±5%	1
R119	RD4 7 2251 JM000	Carbon 4.7k ohm 1/4W ±5%	1
R120	RD5 6 1251 JM000	Carbon 560 ohm 1/4W ±5%	1
R121	RD2 7 0251 JM000	Carbon 27 ohm 1/4W ±5%	1
R122	RD1 0 3251 JM000	Carbon 10k ohm 1/4W ±5%	1
R123	RD1 8 3251 JM000	Carbon 18k ohm 1/4W ±5%	1
R124	RD2 2 4251 JM000	Carbon 220k ohm 1/4W ±5%	1
R125	RD3 3 3251 JM000	Carbon 33k ohm 1/4W ±5%	1
R127	RD4 7 2251 JM000	Carbon 4.7k ohm 1/4W ±5%	1
R129	RD3 3 1251 JM000	Carbon 330 ohm 1/4W ±5%	1
R130	RD1 0 0251 JM000	Carbon 10 ohm 1/4W ±5%	1
R131	RD2 7 1251 JM000	Carbon 270 ohm 1/4W ±5%	1
R133	RD1 0 5251 JM000	Carbon 1M ohm 1/4W ±5%	1
R134	RD3 3 2251 JM000	Carbon 3.3k ohm 1/4W ±5%	1
R135	RD2 2 5251 JM000	Carbon 2.2M ohm 1/4W ±5%	1
R136	RD1 0 2251 JM000	Carbon 1k ohm 1/4W ±5%	1
R137	RD5 6 2251 JM000	Carbon 5.6k ohm 1/4W ±5%	1
R201	RD1 0 3251 JM000	Carbon 10k ohm 1/4W ±5%	1
R202	RD2 7 2251 JM000	Carbon 2.7k ohm 1/4W ±5%	1
R203	RD1 0 3251 JM000	Carbon 10k ohm 1/4W ±5%	1
R204	RD1 2 2251 JM000	Carbon 1.2k ohm 1/4W ±5%	1
R205	RD1 0 0251 JN000	Carbon 10 ohm 1/4W ±5%	1
R206	RD2 2 2251 JM000	Carbon 2.2k ohm 1/4W ±5%	1
R207	RD5 6 3251 JM000	Carbon 56k ohm 1/4W ±5%	1
R208	RD1 2 3251 JM000	Carbon 12k ohm 1/4W ±5%	1
R209	RD8 2 2251 JM000	Carobn 8.2k ohm 1/4W ±5%	1
R210	RD2 2 2251 JM000	Carbon 2.2k ohm 1/4W ±5%	1
R211	RD1 5 4251 JM000	Carbon 150k ohm 1/4W ±5%	1
R212	RD1 8 3251 JM000	Carbon 18k ohm 1/4W ±5%	1
R213	RD1 0 2251 JM000	Carbon 1k ohm 1/4W ±5%	1
R214	RD1 8 3251 JM000	Carbon 18k ohm 1/4W ±5%	1
R215	RD2 2 2251 JM000	Carbon 2.2k ohm 1/4W ±5%	1
R216	RD3 3 3251 JM000	Carbon 33k ohm 1/4W ±5%	1
R218	RD1 8 4251 JM000	Carbon 180k ohm 1/4W ±5%	1
R219	RD4 7 2251 JM000	Carbon 4.7k ohm 1/4W ±5%	1
R220	RD5 6 1251 JM000	Carbon 560 ohm 1/4W ±5%	1
R221	RD2 7 0251 JM000	Carbon 27 ohm 1/4W ±5%	1
R222	RD1 0 3251 JM000	Carbon 10k ohm 1/4W ±5%	1
R223	RD1 8 3251 JM000	Carbon 18k ohm 1/4W ±5%	1
R224	RD2 2 4251 JM000	Carbon 220k ohm 1/4W ±5%	1
R225	RD3 3 3251 JM000	Carbon 33k ohm 1/4W ±5%	1
R227	RD4 7 2251 JM000	Carbon 4.7k ohm 1/4W ±5%	1
R229	RD3 3 1251 JM000	Carbon 330 ohm 1/4W ±5%	1
R230	RD1 0 0251 JM000	Carbon 10 ohm 1/4W ±5%	1
R231	RD2 7 1251 JM000	Carbon 270 ohm 1/4W ±5%	1
R233	RD1 0 5251 JM000	Carbon 1M ohm 1/4W ±5%	1
R234	RD3 3 2251 JM000	Carbon 3.3k ohm 1/4W ±5%	1
R235	RD2 2 5251 JM000	Carbon 2.2M ohm 1/4W ±5%	1
R236	RD1 0 2251 JM000	Carbon 1k ohm 1/4W ±5%	1
R237	RD5 6 2251 JM000	Carbon 5.6k ohm 1/4W ±5%	1
R301	RD5 6 2251 JM000	Carbon 5.6k ohm 1/4W ±5%	1
R302	RD5 6 1251 JM000	Carbon 560 ohm 1/4W ±5%	1
R303	RD3 3 1251 JM000	Carbon 330 ohm 1/4W ±5%	1
R304	RD3 9 4251 JM000	Carbon 390k ohm 1/4W ±5%	1
R305	RD5 6 1251 JM000	Carbon 560 ohm 1/4W ±5%	1
R306	RD5 6 A251 JM000	Carbon 5.6 ohm 1/4W ±5%	1
R307	RD1 0 3251 JM000	Carbon 10k ohm 1/4W ±5%	1
R308	RD6 8 0251 JM000	Carbon 68 ohm 1/4W ±5%	1
R341	RD1 0 0251 JM000	Carbon 10 ohm 1/4W ±5%	1
S1	4 2319 73750	Slide Lever Switch (Function)	1
S2	4 2319 72190	Slide Switch (Record/Play)	1
S5	4 2319 71990	Slide Switch (Beat)	1
S7	4 2319 71900	Slide Switch (DIN)	1
T301	4 2589 71460	OSC Transformer	1
TH1	204 5 9000 00090	Thermister, SDT09	1
CN1	4 2369 71881	Connector 8P	1
CN3	4 2369 71851	Connector 4P	1

Ref. No.	Part No.	Description	Q'ty
	AMPLIFIER P.C.B. ASSY		
CN4	4 2369 71851	Connector 4P	1
CN5	4 2369 71851	Connector 4P	1
	4 2369 70740	RT Pin	8
VR1	4 2229 71548	Volume Control (Tone, A-20k)	1
VR2	4 2229 71763	Volume Control (Volume, A-20k)	1
	LED P.C.B. ASSY		
	4 2029 70770	LED P.C.B. Assy	1
	4 2269 30471	LED P.C.B.	1
D301	202 5 7900 02420	Diode, SLP-24B (Record/Battery)	1
D327	202 5 7900 02420	Diode, SLP-24B (FM Stereo)	1
	MECHANISM		
S6	4 2319 72260	Leaf Switch (Power)	1
	4 2359 70990	RT Pin Socket	6
CN1	4 2359 72532	Connector 8P Assy	1
CN4	4 2359 72893	Connector 4P Assy	1
HD1	4 2429 71191	R/P Head	1
HD2	4 2429 71521	Erase Head	1
	4 2539 70590	Choke Coil	1
	4 5279 70753	Motor	1
	141 0 1619 25800	Eject Lever Assy	1
	141 0 1619 25801	Stop Lever Assy	1
	141 0 1619 25802	F.F. Lever Assy	1
	141 0 1619 25803	Rewind Lever Assy	1
	141 0 1619 25804	Play Lever Assy	1
	141 0 1619 25805	Record Lever Assy	1
	141 0 3119 16501	Chassis Assy	1
	141 0 3519 14800	Pause Bracket Assy	1
	141 0 5219 05006	Completed Flywheel	1
	141 0 5319 04001	Take-up Reel Assy	1
	141 0 5319 04700	Supply Reel Assy	1
	141 0 5419 02300	Pinch Roller Assy	1
	141 0 5519 06300	Take-up Arm Assy	1
	141 0 7439 06200	Idler Arm Assy	1
	141 0 7519 01300	Dial Shaft Assy	1
	141 2 1519 23010	Dial Plate	1
	141 2 3119 11100	Radio Chassis	1
	141 2 3519 36000	Flywheel Support	1
	141 2 3519 38300	Bracket Plate	1
	141 2 3519 41400	Plate	1
	141 2 3529 19200	Spacer, Head	1
	141 2 4179 00600	Nut M9	1
	141 2 4219 12100	Screw Washer	1
	141 2 4219 14000	Screw	5
	141 2 4219 20600	Poly Wave Screw	2
	141 2 4459 20500	Brake Cover	2
	141 2 4539 09400	Washer	3
	141 2 4539 15700	Washer	3
	141 2 4539 17200	Washer	1
	141 2 4729 01900	Lug	1
	141 2 5119 04201	Pointer	1
	141 2 5389 02600	Dial Drum	1
	141 2 5519 03300	Dial Roller A	5
	141 2 5519 26500	Take-up Arm Gear	1
	141 2 5519 26600	F.F. Gear	1
	141 2 5519 26700	Pulley Gear Idler	1
	141 2 5649 09700	Reel Belt	1
	141 2 5649 11300	Capstan Belt	1
	141 2 5719 06401	Oilless Bearing	1
	141 2 6119 10300	Pause Lever	1
	141 2 7319 32600	Lock Plate	1
	141 2 7319 33300	Slide Base	1
	141 2 7419 51300	Sensor Lever	1
	141 2 7419 53601	Brake Arm	1
	141 2 7419 53700	Shut-off Lever	1
	141 2 7419 54000	Pause Plate	1
	141 2 8119 08800	Counter	1
	141 2 8139 06000	Counter Bracket	1
	141 2 8419 09000	Interlock Lever	1

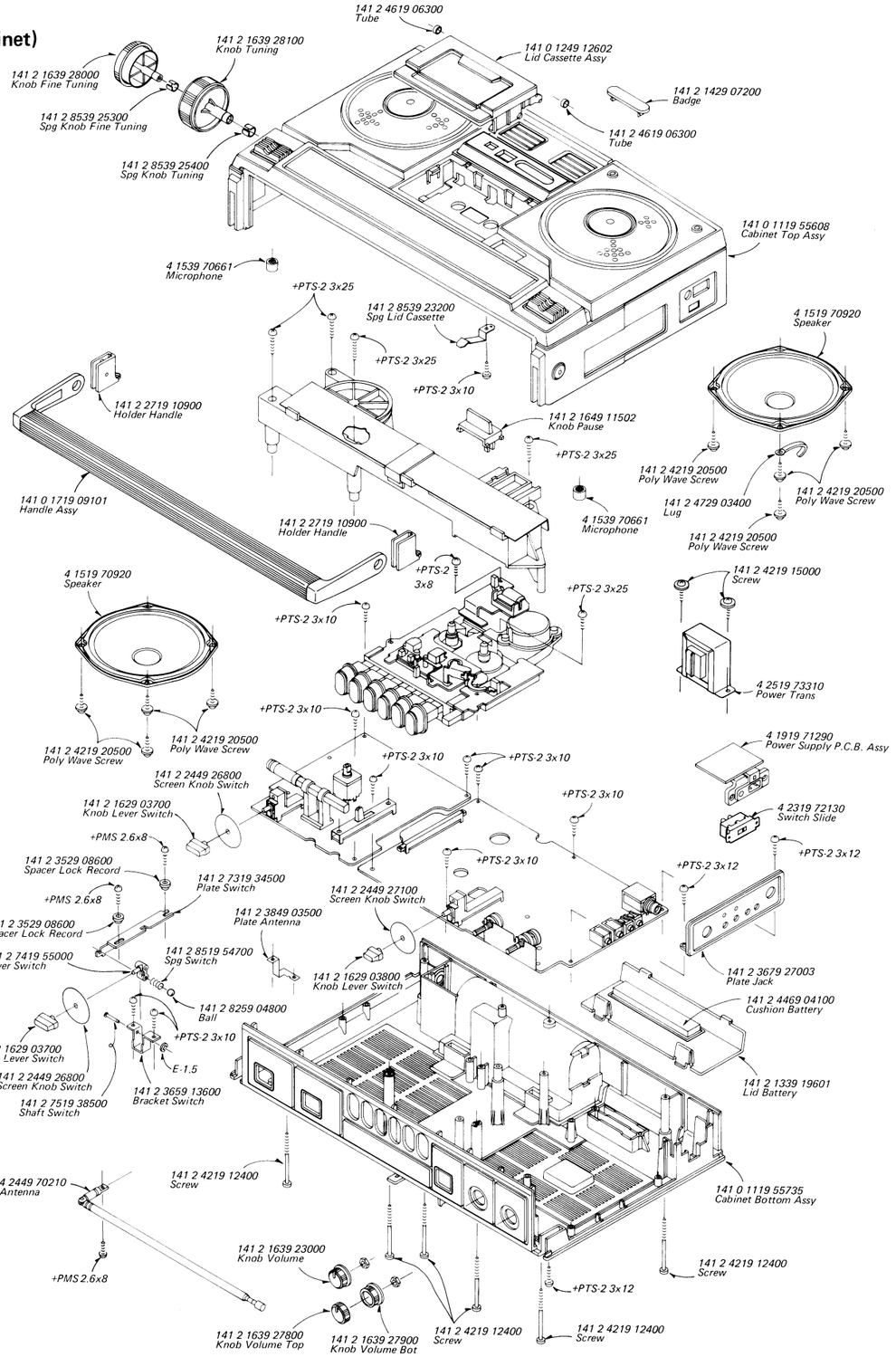
PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
	MECHANISM		
	141 2 8519 06700	Spring, Cassette Case Lever B	1
	141 2 8519 06900	Spring, Pushout Cassette Plate	1
	141 2 8519 41400	Spring, Idler	2
	141 2 8519 68101	Spring, Pause	1
	141 2 8519 72100	Spring, Pinch Roller	1
	141 2 8519 72400	Spring, Lock Plate	1
	141 2 8519 72500	Spring, Interlock	1
	141 2 8519 72600	Spring, Take-up Arm	1
	141 2 8519 72800	Spring, Slide Base	1
	141 2 8519 72900	Spring, Eject	1
	141 2 8519 73000	Spring, Supply	1
	141 2 8519 73900	Spring, Play	1
	141 2 8519 74000	Spring, F.F.	3
	141 2 8519 74100	Spring, Record	1
	141 2 8519 74300	Spring, Azimuth	1
	141 2 8519 74800	Spring, Sensor	1
	141 2 8539 31700	Spring, R/P Switch	1
	141 2 8539 31802	Spring, Ground	1
	141 2 8539 31900	Spring Cassette	1
	101 3 1302 00411	Screw, Pan Hd. +M2.0x4	1
	101 3 1302 01211	Screw, Pan Hd. +M2.0x12	2
	101 3 1302 60411	Screw, Pan Hd. +M2.6x4	1
	101 3 1303 00411	Screw, Pan Hd. +M3.0x4	2
	101 3 2502 01011	Screw, Cylinder Hd. -M2.0x10	1
	103 3 1302 60511	Screw, Pan Hd. Tapping-2 +M2.6x5	1
	103 3 1702 00811	Screw, Bind Hd. Tapping-2 +M2.0x8	1
	110 3 1202 00023	Finished Washer M2.0	1
	110 3 1204 00011	Finished Washer M4.0	1
	112 3 1302 00040	E Ring M2.0	1
	143 3 1302 60811	Screw, Pan Hd. Tapping-B +M2.6x8	6
	143 3 1302 61611	Screw, Pan Hd. Tapping-B +M2.6x16	2
C340	CD1 0 7160 0000V	Electrolytic 100 μF 16V	1

NOTES: 1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

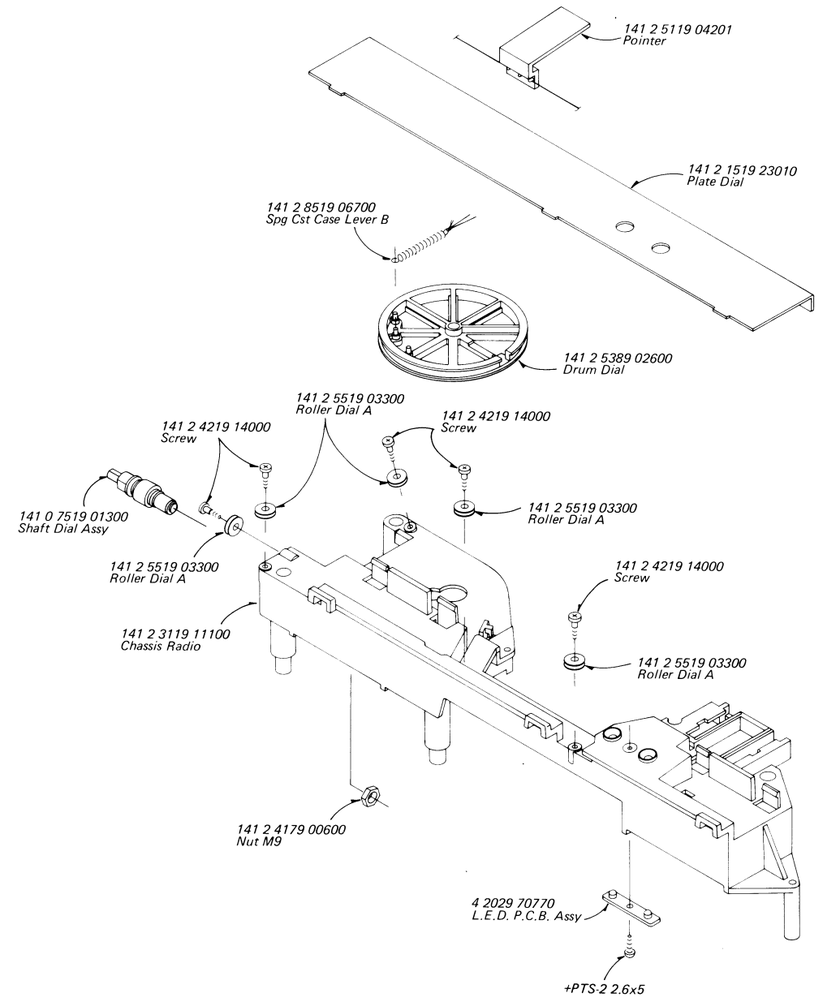
EXPLODED VIEW

(Cabinet)



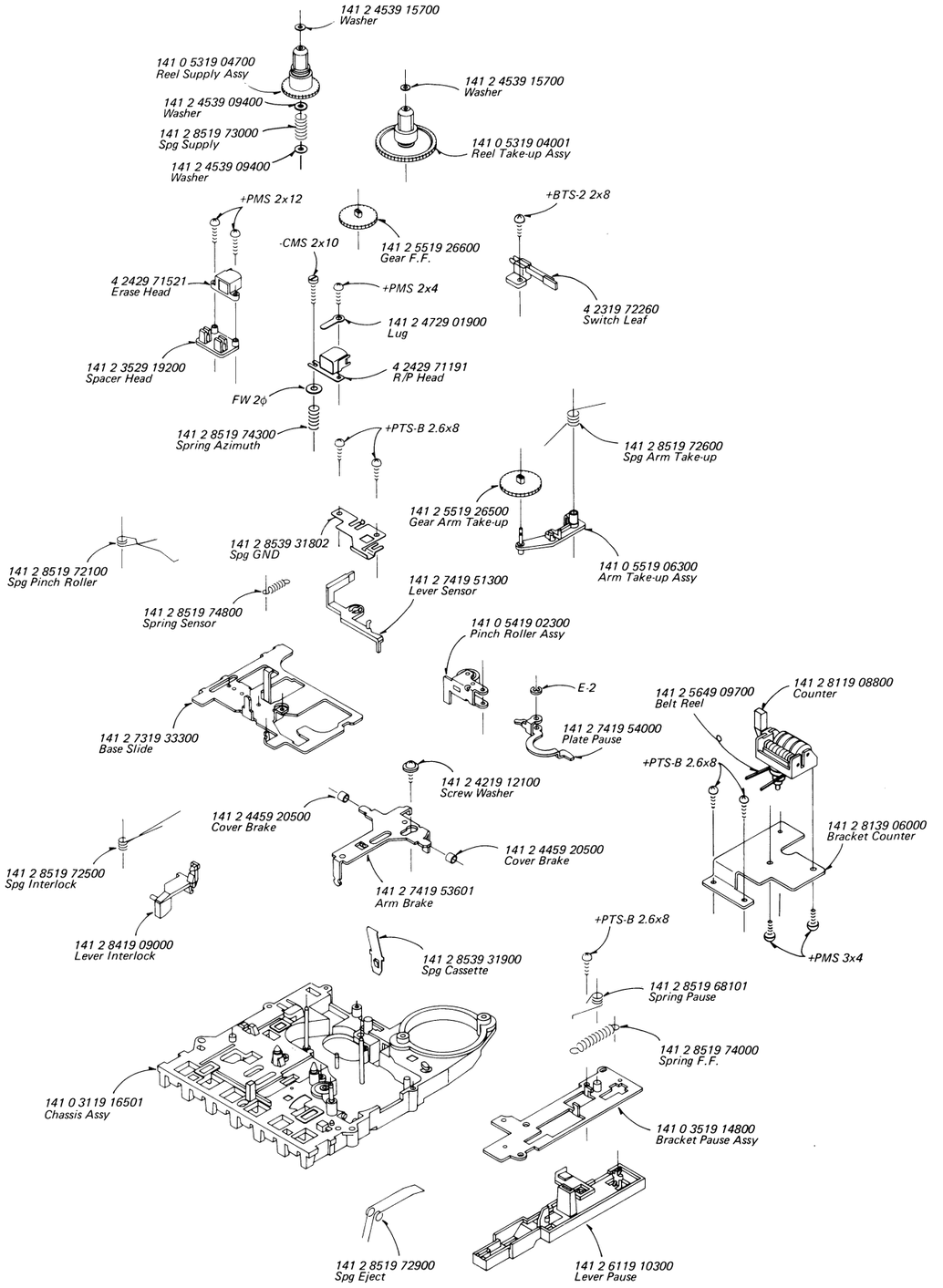
EXPLODED VIEW (Continued)

(Radio Chassis)



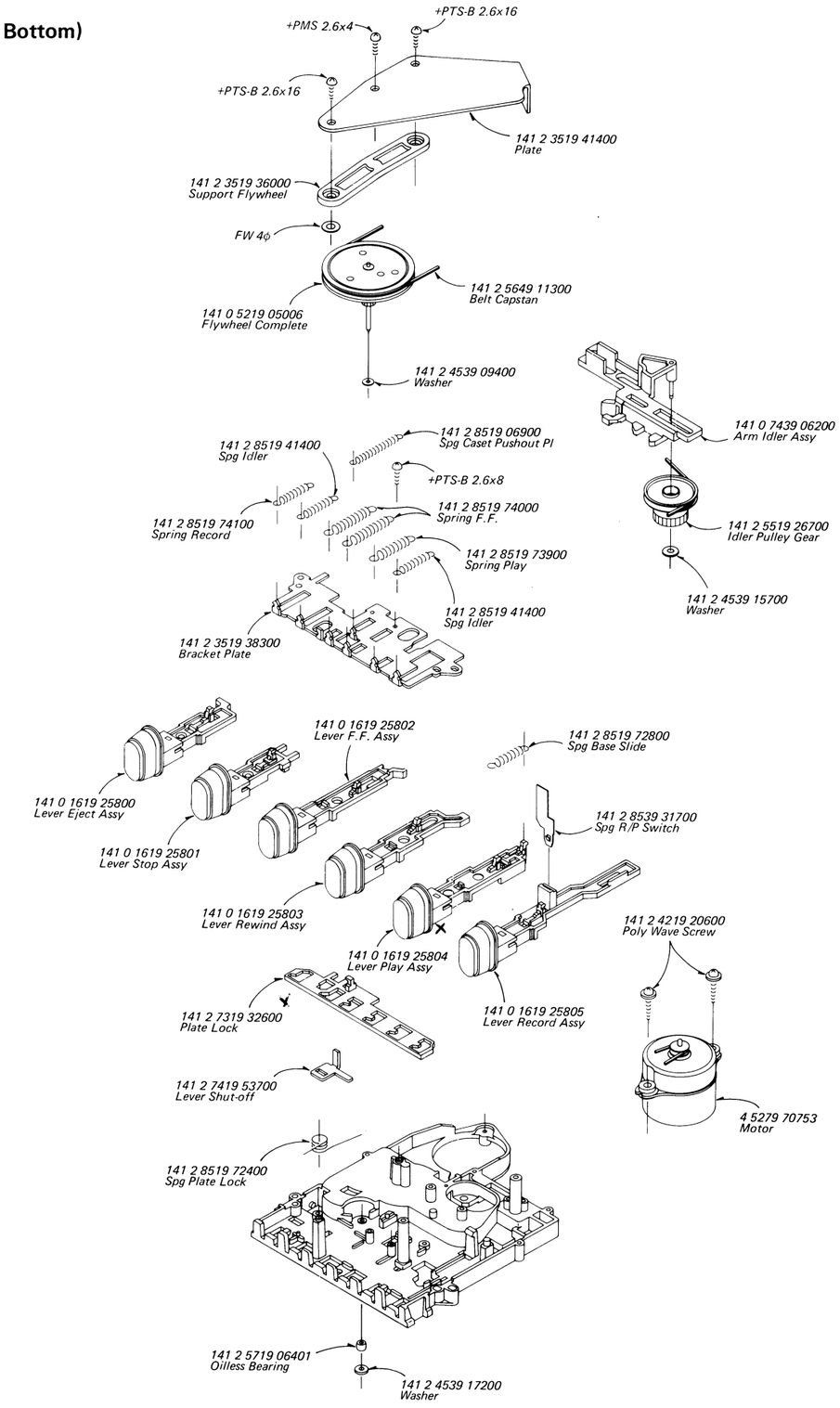
EXPLODED VIEW (Continued)

(Chassis Top)

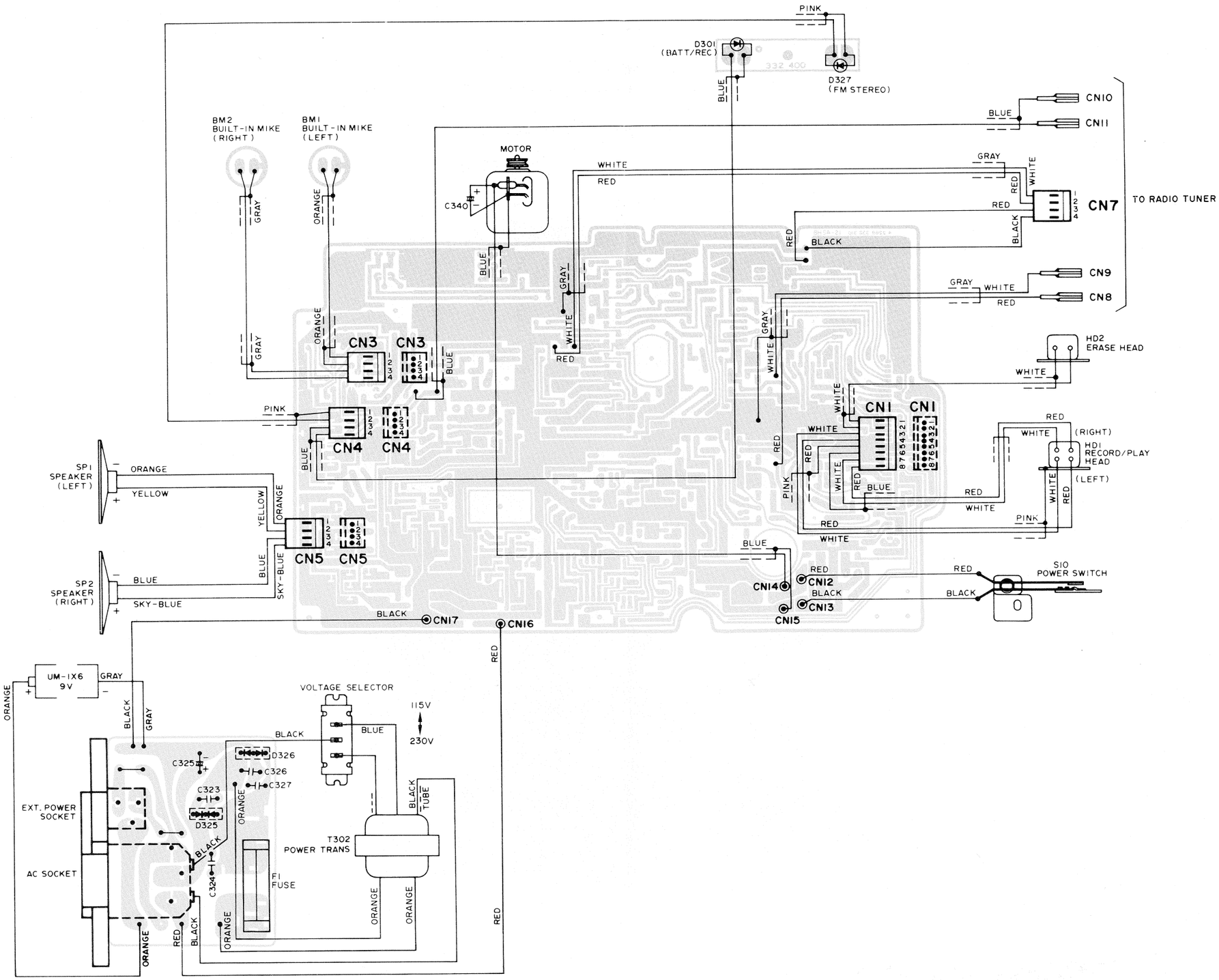


EXPLODED VIEW (Continued)

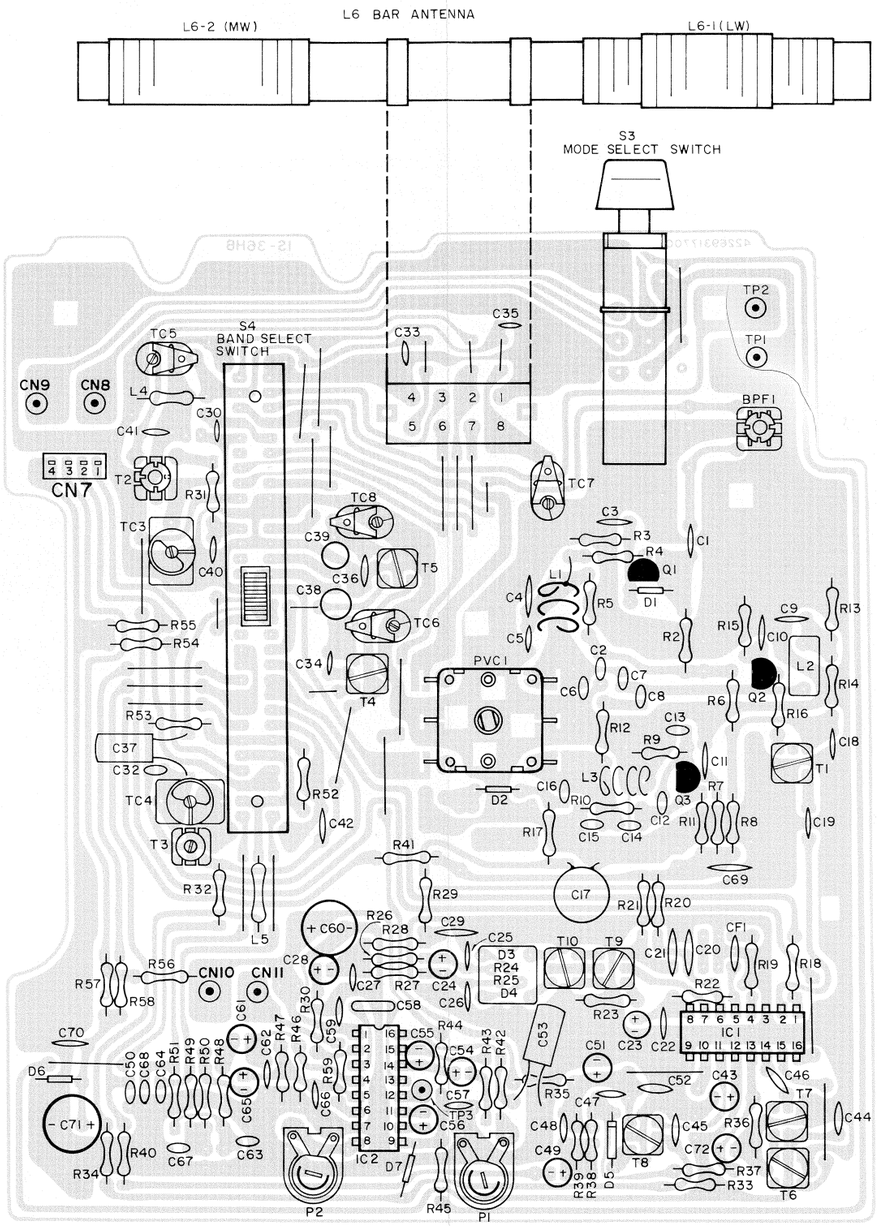
(Chassis Bottom)



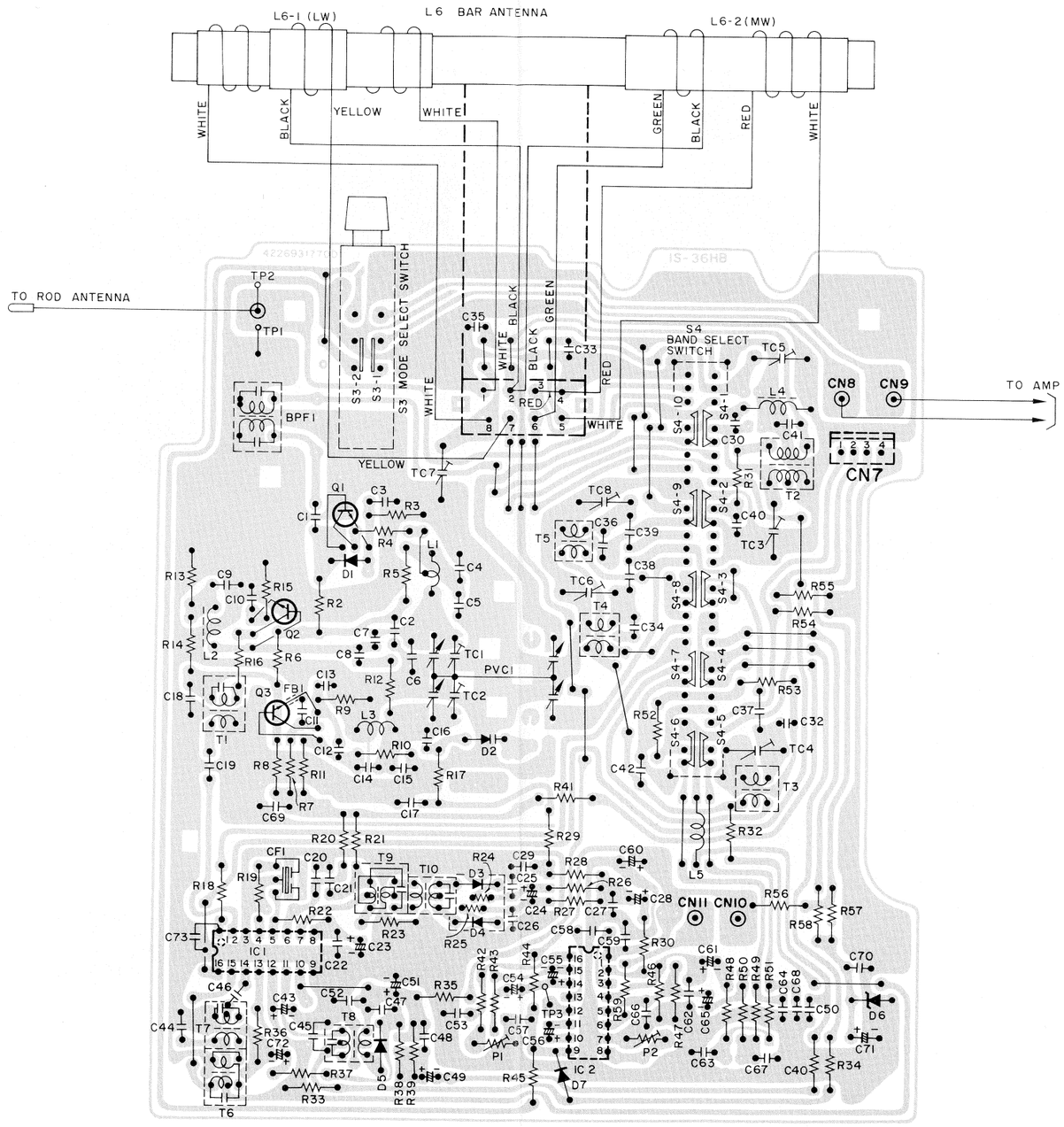
WIRING DIAGRAM



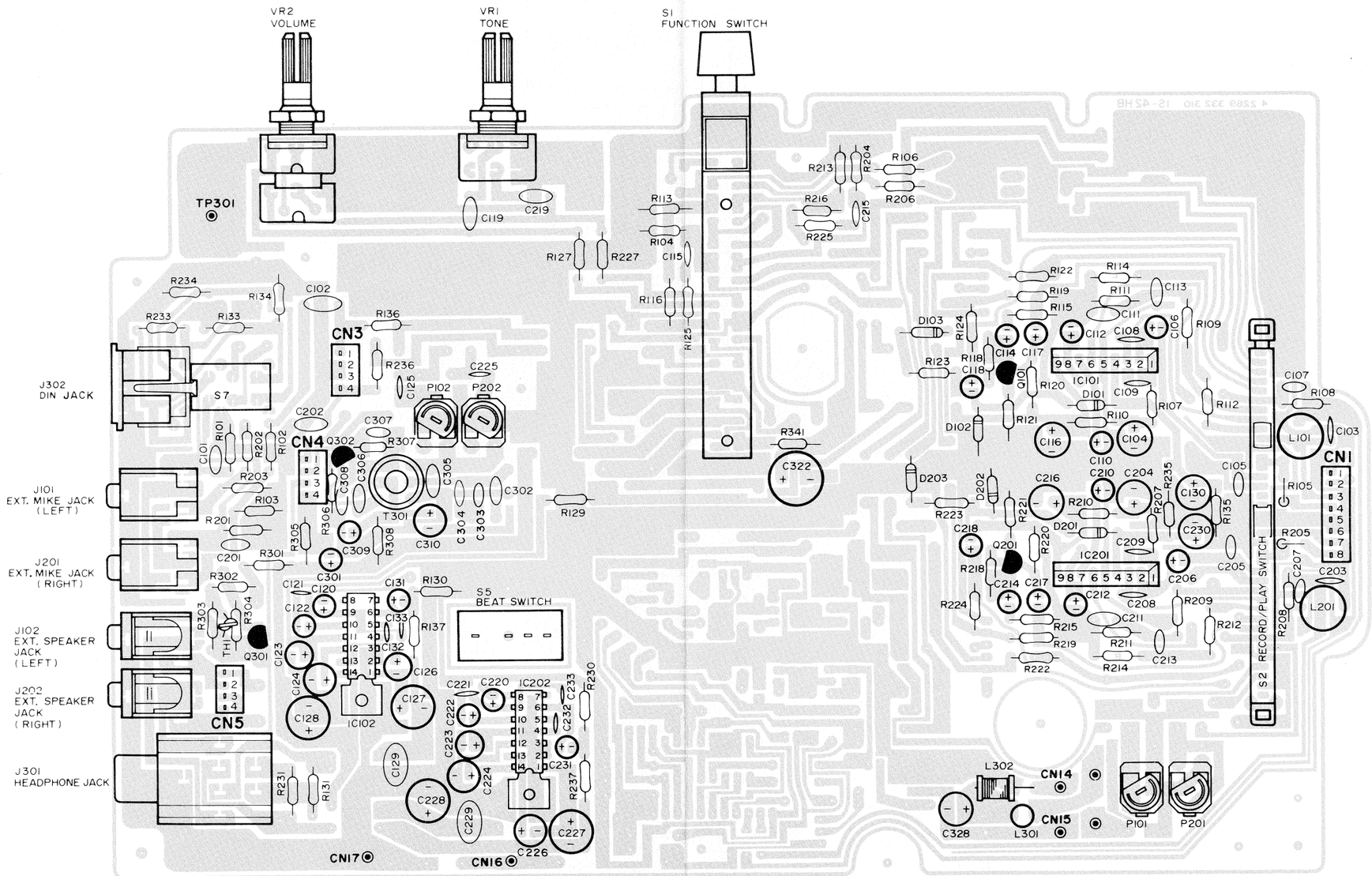
TUNER P.C.BOARD(Top View)



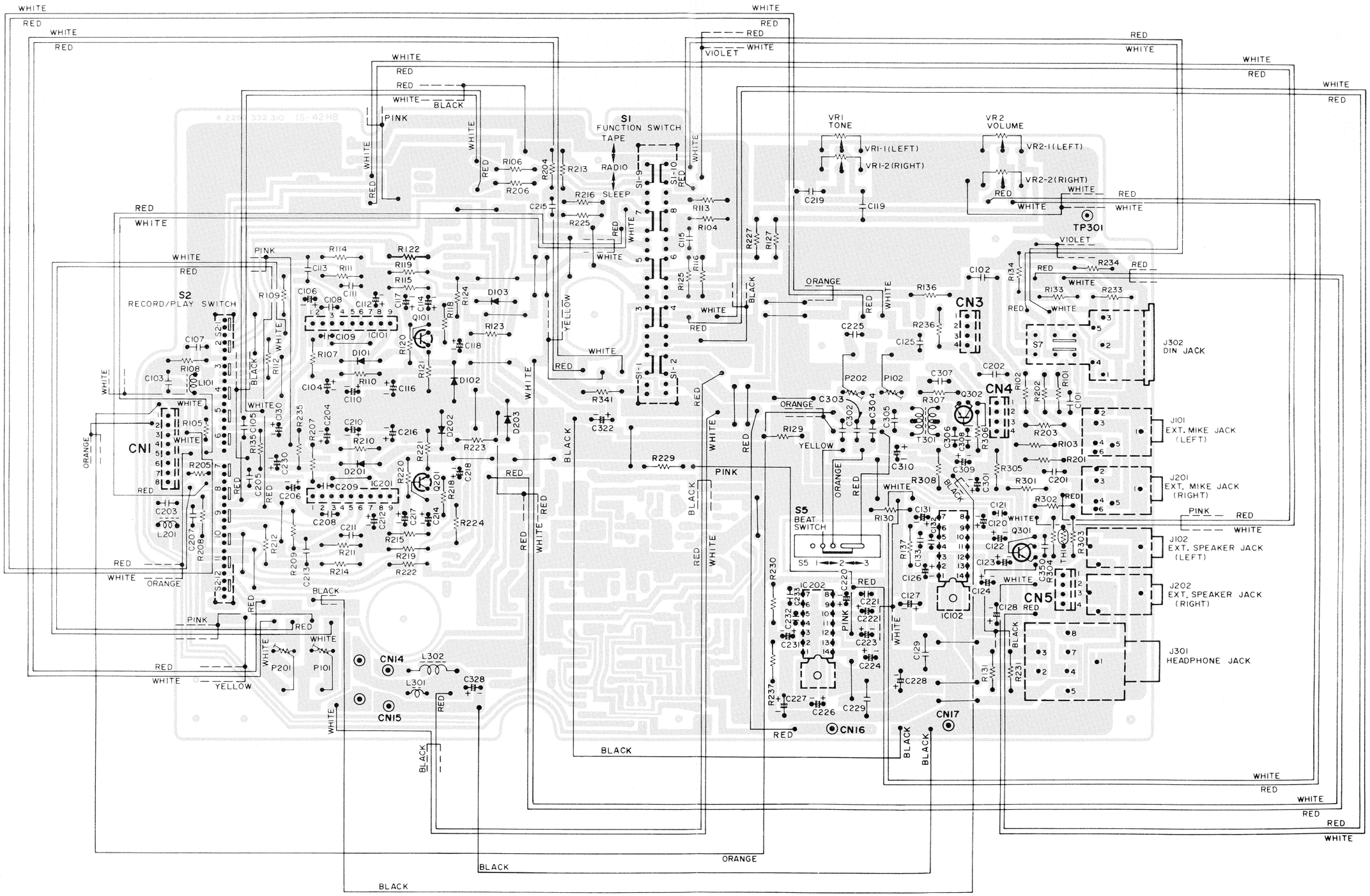
TUNER P.C.BOARD(Bottom View)



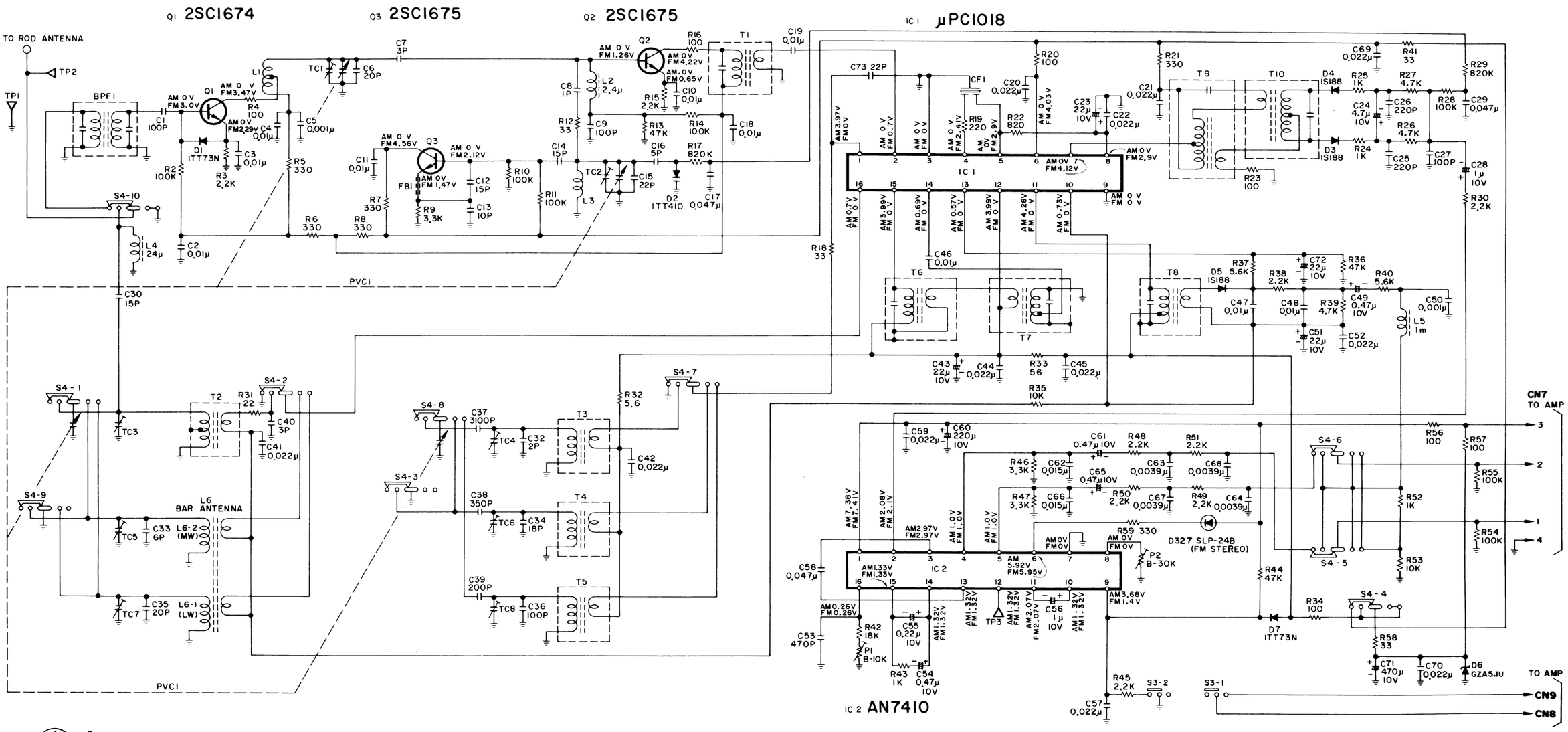
AMPLIFIER P.C.BOARD(Top View)

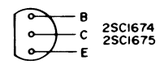


AMPLIFIER P.C.BOARD(Bottom View)

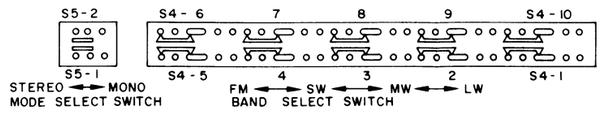


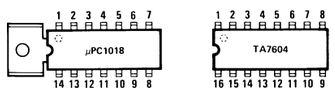
SCHEMATIC DIAGRAM(Tuner)





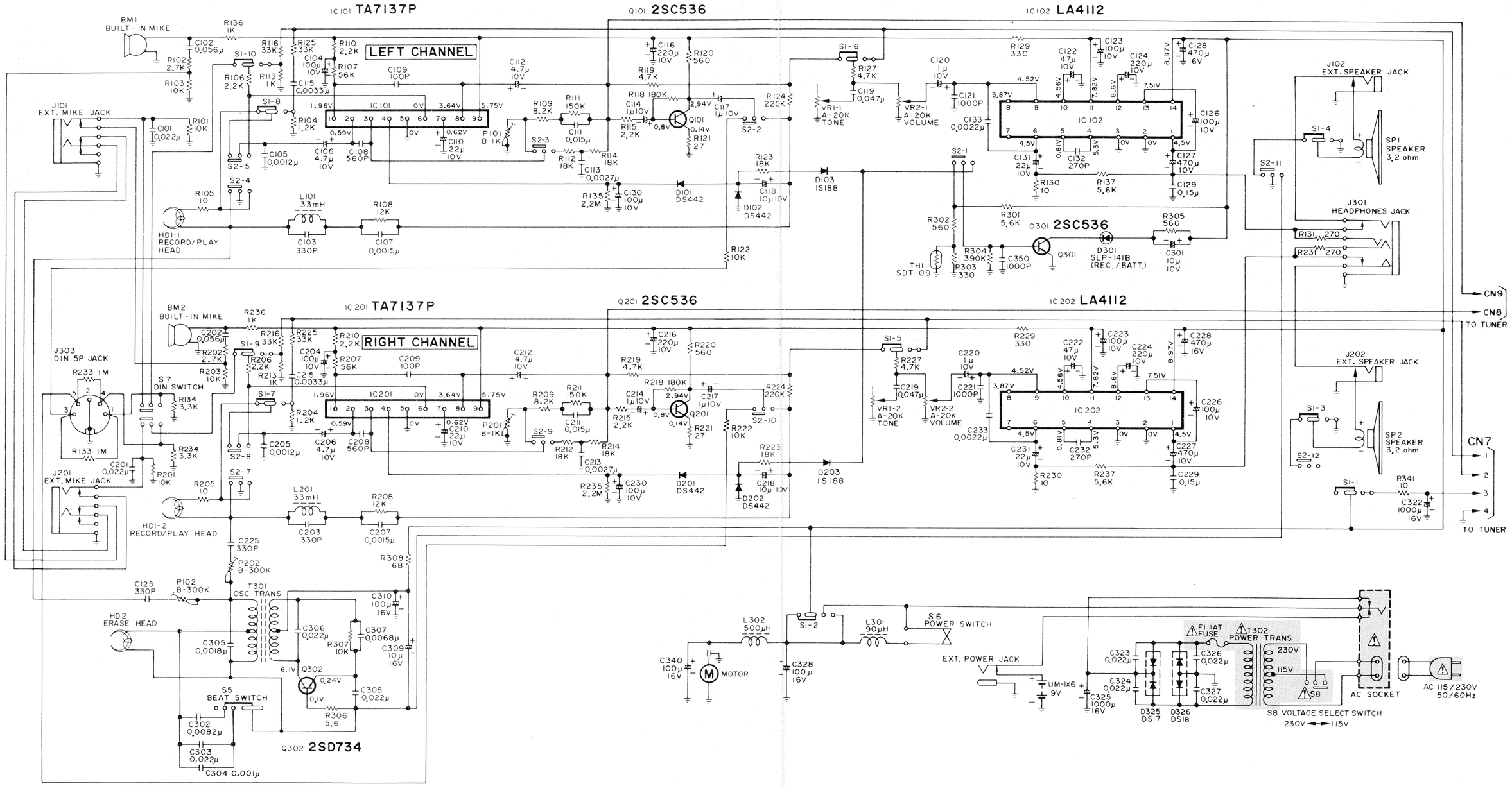
TRANSISTOR BOTTOM VIEW





IC BOTTOM VIEW

SCHEMATIC DIAGRAM (Amplifier)



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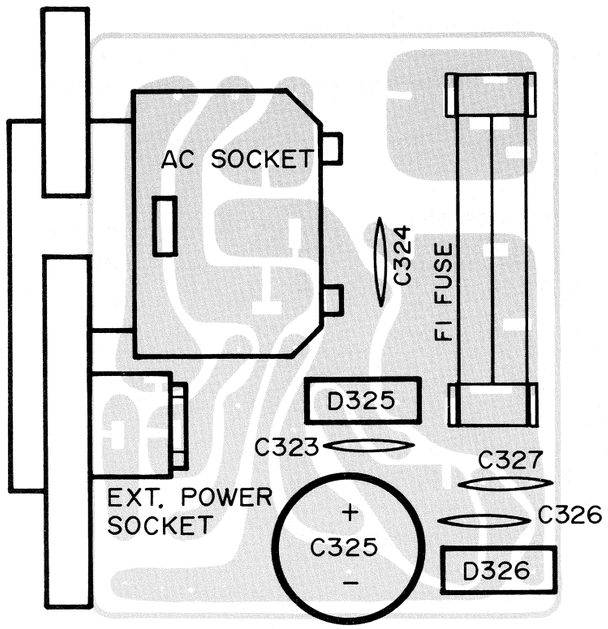
POWER SUPPLY P.C.BOARD (Top View)



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